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PEABODY JOURNAL OF EDUCATION

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HOW IMPORTANT IS A GENERAL EDUCATION?

J. R. ROBINSON

George Peabody College for Teachers

The following quotation is taken from the current catalogue of a state university:

> *"Intelligence Test.*—Persons 21 years of age, or over, who do not possess a satisfactory secondary school record, may secure admission to the University and pursue courses leading to a degree by passing a general intelligence test designed to determine the applicant's mental powers and alertness."

In another state about 1,000 miles from this university a similar policy is found. The following is an excerpt taken from a letter written by the dean of a recognized teachers college in that state:

> "The State Board of Education allows experienced teachers who cannot meet the usual entrance requirements, but who hold the elementary certificate, to continue work for the normal professional certificate and the degree on the following bases:
>
> (1) That their previous work be of median grade or higher, (2) that they have taught successfully for five years or more, and (3) that they rate average or better in a psychological examination."

In the summer of 1931 a student was given temporary admission to the graduate school at Peabody College on the basis of a statement that she had just received a bachelor's degree from a college accredited by the Southern Association. When her transcript was received, it was found that, although she had an excellent scholastic record in college—practically all of her grades being A's and B's—she had had less than two years of high school preparation. She had been admitted to college on the basis of native ability and on her established reputation as a teacher. Upon the completion of the college work required she had been given her degree. Her application for admission to the graduate school was rejected, but she was permitted to continue in class until the end of the summer quarter. Here again she demonstrated her ability by receiving B and C grades in the graduate courses in which she was enrolled.

Her rejection was not because of any doubt of her ability to pursue graduate study in the fields in which she had had preparation. She had demonstrated her ability both in undergraduate and in graduate work. She was

rejected because each graduate student is required to furnish proof that he has a liberal education—an education such as one is expected to acquire in an eight-year program of secondary and collegiate study satisfactorily completed. It has been our policy to require even an intelligent graduate student to have the general education represented by this minimum amount of training. Although we admit that some students with little training are better than some others with a great deal, we have tried to hold consistently to the ideal of an educated teacher and do not believe that intelligence makes learning unnecessary. The applicant's college work had been confined in the main to courses in English, the social sciences, elementary science and education. She had taken no courses in mathematics, foreign languages, or advanced science.

What we wanted was proof of an education. In the absence of an adequate system of examination to test the scope and thoroughness of this education, we in America are accustomed to accept documentary proof; but when the proof by documents is lacking, then we have no proof at all. However, in this case the applicant freely admitted that she did not have the quantity of education usually required. She merely insisted that none of this mattered, that she was able to hold her own in graduate classes in competition with students who had come up through our educational system in the regular way. Is this general education, then, so important? Should we be willing to accept native intelligence or "ability to do" in its place? Is there something in maturity and experience that may be substituted for it, and should the highly intelligent, mature student be encouraged to take a shorter road?

Every year at Peabody we have been having a number of cases such as the one described above. Our own graduates of twenty years ago, when teaching experience was sometimes substituted for two needed high school units, have been required to make up the deficiency with additional undergraduate work. Our students naturally protested, and we began to wonder if other graduate schools had the same problem, and, if they did, what were their policies and methods of procedure. Consequently a letter of inquiry was sent to "the Chairman of the Graduate Committee" of 118 institutions listed in the College Blue Book as conferring graduate degrees.

Replies were received from 105, or 89 per cent of the institutions. These are located in forty-four states and in the District of Columbia. The graduate schools replying were divided into the following groups with reference to their policies and practices in regard to high school preparation. It is understood that the college from which the applicant received his bachelor's degree is a college recognized as standard by the graduate school to which the student makes application.

Twenty-four colleges and universities (23 per cent of those replying) check the high school record and either require that deficiences be made up or do not admit the student.

Two universities check the high school record, but no deficiency has ever been found; are uncertain what the policy would be in case of an inadequate record.

Three universities check both the high school and the college record, but are disposed to overlook discrepancies in the high school record if the college record is good.

Five institutions check the high school records of those who graduated fifteen or twenty years ago and require that deficiencies be made up. They do not check the high school records of recent graduates because the bachelor's degree guarantees that the high school preparation is adequate. There is no need for checking discrepancies when there are no discrepancies.

Twenty-three institutions (22 per cent of those replying) do not check the high school record of any applicant because the bachelor's degree and the student's college record guarantee that the high school preparation is adequate. Officers of two of these institutions state that occasionally suspicions are aroused and then the record is checked and any deficiencies must be made up. Three others say that if they should find that an accredited college allowed a student to graduate with inadequate high school preparation, they would refuse to accept a degree from that college.

Twelve institutions do not check the high school record, but it is not clear whether this is because deficiencies in this record are not considered important or whether the bachelor's degree is considered a guarantee of adequate preparation.

Thirty-six institutions (34 per cent of those replying) do not check the high school record because, even if the record is inadequate, it doesn't matter. The student's ability to do graduate work is what counts. Most of these institutions check the undergraduate record or take other precautions to insure the student's ability to pursue work in his major field. He may be admitted on probation at first, but after he has demonstrated his ability he is admitted to candidacy. Officers of six of these institutions express the opinion that graduates of fifteen or twenty years ago are not handicapped even though their high school preparation is below that required by present standards. Those who have been teaching, especially, have made good any deficiencies in their previous preparation.

The following quotations illustrate the different points of view:

"We are not justified in waiving requirements simply because a student finished many years ago. As a rule this is the very type of student who needs to go back into undergraduate work and bring his information up to date. I am inclined to believe that the high school preparation is as important as the preparation secured in college. . . ."

* * *

". . . We do not shift to accrediting associations all of our perplexities. . . . If a school in the Southern Association graduates a student who did not have the required number of high school units, that fact in no sense relieves our school of its responsibility to see that these requirements are met."

"We do not consider the accrediting of an institution as prohibiting us from investigating the records of individual applicants."

* * *

"We cannot admit students to our Graduate School just because they have a degree from an accredited institution. If we followed this practice, we would be underwriting all of the lax administration in every accredited institution. . . . We have been constantly met with the statement that a baccalaureate degree from any accredited institution ought to be good enough for admission to the Graduate School of any other institution, but it will never be possible to raise the standards by such a method."

* * *

"Not for a generation or more have students been admitted into New England colleges, from which most of our graduate students come, when their preparatory requirement is not met."

* * *

"Since in our section admission to such a college requires at least fifteen credits from a properly constituted high school, it is equivalent to demanding that the high school requirements be met. All who have received the master's degree in the last twenty years have met this requirement."

* * *

"I would not expect an accredited institution to grant a diploma to a person with four or five high school units lacking."

* * *

"Students are justified in claiming that an accredited bachelor's degree should be accepted without reference to their high school units. After all, is it not primarily the business of the institution which grants them the A.B. degree? The very fact that they have demonstrated their ability to qualify for an accredited bachelor's degree ought, it seems to me, to free the graduate department of some other institution from the necessity, or even the privilege, of going back to their secondary school record."

* * *

"We quite agree that the baccalaureate degree of any accredited institution should be accepted without investigation of preliminaries to entrance at that institution."

* * *

". . . University accepts the A.B. or equivalent degree of any accredited college or university at face value, without inquiring into the amount or quality of high school work, providing the quality of the undergraduate work meets our minimum requirement in the matter of scholarships. . . . Indeed we go a step beyond this. When a student enters this university with one full year of acceptable college work to his credit, we disregard his high school work. He is not required even to send us a record of his preparatory school work."

* * *

"A student by his four years in college and by making a good record in those four years irons out, as it were, any irregularities that may have existed. It seems to me that we do the same thing when we examine a student's high school record only, and do not go back to what happened to him in the elementary schools."

* * *

"We are willing to accept the fact that he has obtained a bachelor's degree from an accredited college as constituting his fitness."

* * *

"One who has been out of college and in school work has obtained a great deal in the way of developing growth which ought to put him on a level with our present graduates."

* * *

"Should it come to our notice that a particular student did not fulfill the present entrance requirements for college, but did fulfill the requirements existing at the time when he began his collegiate studies at any accredited college, including our own, we would admit him into the Graduate School unconditionally. Should we find that the student from an accredited college lacked entrance requirements existing when he entered college, we would still take it for granted that the accredited college had favorably passed on this apparent deficiency."

"If in the interval the student has been teaching in a high school or a college we are inclined to overlook the high school credits entirely."

* * *

"Most of the applicants in our Graduate School who have taken degrees ten or fifteen years previously are teachers, and we have felt that their experience in teaching has probably fully covered any deficiency which they may have had in the matter of high school credits."

* * *

"Experience actually in teaching for years some of the very subjects which could with perfect propriety be counted as fulfilling entrance requirements would seem to me to meet these requirements more satisfactorily than if they had taken these subjects as public school pupils twenty years ago."

* * *

"The ability which has been shown in the undergraduate collegiate years should be sufficient to indicate that the student is prepared to do graduate work."

* * *

"The primary question is whether such a student is qualified to do graduate work in the field specified."

* * *

"The individual student is rated according to what he can do and is not handicapped or penalized because he was not held to the fulfillment of certain requirements at an earlier period in his career."

* * *

"The test of a student's fitness to undertake graduate study is his ability to carry the work successfully."

* * *

"If the student can demonstrate high ability in scholarship as a graduate student, all the entrance requirements will be removed."

* * *

"My impression is that some departments would pay much more attention to the student's preparatory school record than others. For example, in the Department of French it is likely that the department would survey the student's preparatory work in French and feel that the student should have entered college with at least two units, if she is going to be capable of carrying full graduate work here. . . . . The Department of Mathematics might well say that a student who had not had the usual preparatory work in mathematics could not possibly have fulfilled the undergraduate major, but our refusal to accept such a student would be based not upon her preparatory work, but upon deficiencies in the undergraduate major. . . .

"I feel that this method is a much sounder and fairer one than the one which you suggest, and that if you base your insistence that a student take more preparatory work upon a failure to complete an undergraduate major rather than upon deficiencies in that student's elementary training, you will find much less complaint, although the result will be the same."

By way of summary, 34 colleges and universities (or fewer than one-third) check the high school record, and 71 (or more than two-thirds) do not.

Of the 34 institutions that do check the high school record:

24 require discrepancies to be made up;
2 have no policy;
3 are inclined to overlook discrepancies.
5 check only those who graduated 15 or 20 years ago.

Of the 71 institutions that do not check the high school record:

23 believe that there are no discrepancies;
12 give no opinion;
36 believe that discrepancies in the high school record are unimportant.

The following conclusions seem to be justified from a study of the replies:

1. The problem of the applicant with a degree from an accredited college, but with inadequate secondary preparation, does not occur at all in a large number of institutions and does not present itself often in any institution. It may be found in one or two colleges or universities in a state and yet be unknown in other institutions of the same state. Such cases seem to be fairly evenly distributed over the country and occur in every section, but are found least often in New England.

2. Approximately half of the graduate schools either check the high school record of candidates or assume that it has been satisfactorily checked by some other agency, but only one-fourth of the institutions check the record with the definite policy of requiring that deficiencies be made up. In more than a third of the graduate schools deficiencies in the high school record are not considered of vital importance.

3. There is a disposition on the part of many deans to let the student's ability to do graduate work be the sole determining factor.

4. Checking the student's college record to insure adequate preparation for graduate work in the student's major subject seems to be practically universal. Sometimes this checking goes back into the high school record.

5. Sometimes the student's college record is checked to insure a certain cultural or scholarly background. For the same purpose, apparently, as well as for the purpose of insuring the possession of needed tools for graduate work, are some requirements such as a reading knowledge of a foreign language. There is a feeling that a general education on the part of the applicant may be guaranteed without going back to his high school preparation.

Is a general education important? Unless we make an exception in the case of the mature student, it is apparently considered important by college officers everywhere. The young student must present his credentials or pass examinations for college entrance. Examinations and entrance requirements cover specified academic subjects. Native intelligence, or ability to carry freshman work, will not for him be accepted as a satisfactory substitute. Quantity as well as quality is required of the young candidate for the bachelor's degree. He must have 120 semester hours even though his accomplishment be very superior. Many senior college students are in classes that are open to graduate students. If a junior in the undergraduate school demonstrates his ability to do excellent work in these classes, comparing favorably with students who are candidates for the master's degree, he is not advised or permitted to omit further work in the senior college.

Since this liberal education for the young student is considered important so universally by college officers, why do so many universities consider it unimportant for the mature experienced student? Is it not because of a belief

that an education may be acquired outside of high school and college—either wholly or in part—and that the mature student really has obtained that which the young student must get by completing a definite curriculum?

If this explanation seems plausible, then there is no inconsistency in our educational philosophies. We expect both the young and the mature applicant for admission to the graduate school to have a general education. We differ only in the proof demanded of the presence of this general education on the part of the mature student. Let us examine these proofs. We find, in the absence of complete documentary evidence of a regular high school and undergraduate education, the following used as evidences of the candidate's fitness for admission to the graduate school: (1) Maturity and experience; (2) a satisfactory score on an intelligence test; (3) a superior quality of work in college; (4) ability to pursue graduate courses; (5) documentary evidence of the completion of certain work in college, especially in the major field; (6) examinations.

The admissions officer, when confronted with irregular or fragmentary documents, is likely to note the candidate's maturity and experience. He knows that many persons of maturity and experience are not educated, but the candidate's very application, together with the documents that he does present, shows that he is not an ordinary person of this class. Perhaps the admissions officer reasons along one or both of the following lines:

I. The application for admission to the graduate school implies an interest in things intellectual.

Interest in things intellectual is a quality not suddenly acquired and must have been present in the candidate over a period of years.

Private study must have resulted from this intellectual interest.

Therefore the candidate has a general education.

II. The candidate has been engaged in teaching.

Teaching is an occupation that necessitates study. Therefore the candidate has a general education.

It is hardly necessary to point out fallacies in this reasoning. The demand for graduate degrees may be the impelling force behind the applicant. He may not have a true interest in things intellectual. Such interest as he has may have resulted in merely desultory, ill-planned study, meagre in amount, too narrowly restricted or too widely scattered. The occupation of teaching does not always necessitate study. Many teachers do very little after the first year or two and that little is often confined to the textbooks used.

An intelligence test is not an adequate measure of general education. A high score made by a young student would not be accepted in lieu of scholastic requirements. Such a score when made by a mature student may mean no more than when made by the student without maturity and experience. The test may be useful in eliminating the student of low intelligence, but it is

hard to follow the reasoning that would justify a high intelligence score as a basis for exemption from training.

Superior quality of work in courses taken may be a proof of intelligence, of earnestness and industry, and of a satisfactory preparation in the elementary courses which are essential for the understanding of the advanced courses taken. Superior quality of work, however, is not proof that a knowledge exists—or ever has existed—of subjects that are not prerequisite to the advanced courses actually taken. Courses in our college curricula are not so delicately arranged that it is necessary to complete the first three years of the curriculum before one has ability to carry courses in the senior year successfully. Juniors and seniors who take courses "also open to graduate students," sometimes surpass their classmates who are candidates for the master's degree. The young student, however, is held for the completion of the regular courses in his curriculum. The superior quality of the work done by the mature student in the undergraduate school is, therefore, not sufficient evidence of the possession of a general education; neither does the student's ability to pursue courses in the graduate school prove anything more.

Checking the applicant's undergraduate record for work specifically required is valid evidence as far as it goes. It is usually limited to the preparation deemed necessary for the pursuit of graduate study in the student's chosen field. Even if a more extensive scrutiny is made, it is seldom that a college record made by a mature student can be regarded as a guarantee that the student possesses, in addition to his college training, a training equivalent to that represented by four years of study in a standard secondary school. The applicant may have this equivalent, but the college record does not prove that he has it.

If none of the above tests when applied separately offers satisfactory proof of a general education, will all of them taken together supply this proof? The answer must surely be "No," for the young student may offer all of them save maturity and experience and have his claims denied. He is told that there are no short cuts to a degree, and that his preparation must be thorough and adequate. There are only two methods, generally accepted, of offering proof of an education. Each has its limitations and is subject to attack, but they are the best we have. One of these is the proof by documents that specified courses have been satisfactorily completed at a designated institution of learning. This is accepted as proof because we have confidence in the standards and in the methods of work of the institution designated. The other method is examination. The examinations we are in the habit of giving are those designed for younger students who have recently completed the work which the examinations are to test. Perhaps we need a different type of examination, a different technique, to examine the mature student, much of whose education was acquired many years ago; but

if we have neither the evidence of documents nor the evidence of examination, then we have no valid evidence at all. Instead of proof of a general education, we are substituting faith, and perhaps also, hope and charity.

All of the foregoing discussion is based on the assumption that the general cultural education of the candidate is a matter of importance. If the assumption is false, then all of the arguments fall to the ground, and it would seem that no tests of the candidate are needed except those that pertain to his ability to pursue graduate work.

FACING A DILEMMA IN MODERN EDUCATION

HERBERT DRENNON
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In the hurry of modern civilization many of us find ourselves engulfed in a sort of perpetual motion with little time to consider our destination. Yet, consideration for destiny is one of the earmarks of a life governed by rational principles. The full, rich life is never the impulsive life. The full life is possible to him only who can and does withdraw now and then from the turmoil of customary duties to take a look at this phenomenon we call civilization from a vantage point tranquil and undisturbed. We need to pause occasionally in order to reflect on our problems, share our opinions with one another, visualize our objectives more clearly, and understand more thoroughly the meaning and significance of our educational program as a whole for the betterment of man's material and spiritual interests in this world.

Teachers by focussing their attention on, and giving their efforts to, the ordinary routine of living oftentimes lose their perspective and fail to catch the significance of the drama in which they are taking active parts. Most of us today are so involved in carrying out the details of our program that we forget or neglect to harken unto the voices of those who, from the outposts of civilization, are crying to us that our age is facing imminent peril and disaster. True it is, if we did pause occasionally to listen to these voices, purporting to be prophetic, we should find little harmony in the prophecies uttered.

American civilization especially has been held up as a symbol of what is in store for all western culture. These voices of despair, and they are legion, disturb our ears both in this country and abroad. For example, the German writer, Oswald Spengler, reading the present in the light of the past, prophesies that western civilization is doomed, and writes a treatise on *The Decline of the West*. Other books of a similar nature are being constantly published. Norman Douglas' *Goodbye to Western Culture* is another example. A group of Americans published in 1930 a series of essays entitled *Humanism and America* in which they contended that we, by throwing overboard certain traditional cultures in our mad worship of a materialistic and industrialized age, which measures values in terms of quantity rather than in terms of quality, have forsaken our spiritual birthright.

There are those who look at modern civilization from another angle. Two books of considerable importance in that field are Professor Charles A. Beard's symposia, *Whither Mankind* and *Toward Civilization*. These essays maintain the thesis that this is a machine age, that its basis is economic, and its methods of procedure scientific. They also maintain that the type of culture

which suited a static type of civilization is not suitable for a dynamic type of civilization. All our confusion they attribute to the fact that when the industrial age suddenly dawned upon us it found us with a cultural program that could not be adjusted to a new type of civilization. On trying to adjust it to our present civilization we necessarily became confused in our aims and purposes. These writers, with absolute faith in the trustworthiness of man's inventive and scientific ingenuity, believe that it is up to us to build for ourselves a new culture whose basis is that of forces, industrial, economic, and sociological, working in a modern world. They see little to be proud of in contemporary culture, but they take courage in the fact that this dynamic type of civilization is young, and most of them are optimistic enough to believe that man will emerge from his present state of confused aims and purposes and build a better culture than perhaps ever existed before, especially better in that it will be more expressive of a universal, democratic genius rather than the genius of a few, as was the case in olden days.

There also appeared in 1930 another book written by a Southerner, Professor Edwin Mims, on *Adventurous America*. Professor Mims likewise undertakes to stem the tide of opposition with its currents and counter-currents of cynicism and despair. He shows that we do have here and there in America manifest examples of tastes that are spiritual and cultural rather than materialistic and vulgar.

Certainly, then, if we may judge by the voices that besiege us on all sides today, this modern civilization is confused and disordered. And that is to be expected when our prophets no longer come to us with visions that challenge and inspire. Would we be safe in saying that if modern civilization is to be saved, there must be an ideal, a goal, recognized as such, which is worthy of attainment, and which, because of this worthiness, is capable of inspiring in those who lead a concerted and harmonious effort toward the ideal to be realized? It would seem that modern educators are charged with the responsibility of finding out and stating definitely what the goal of modern civilization should be.

Now, when we turn to the educators, do we find any harmony of agreement when educational methods of procedure and ideals are discussed? Are not their programs often filled with educational panaceas, concocted of facile but futile phrases? If I have been able to catch the meaning of those now at the forefront of educational battle, it seems that confusion exists there as it does everywhere else in modern civilization.

When perils threaten, to whom should we look for guidance? In whom may we trust as leaders? Perhaps the ready answer is, the teachers. The idea has been instilled in us that we are the leaders in the effort to adjust the young to a society of which they are soon to form a part. We have been told that our one mission, among many others, is to inspire the young with ideals and lead them on with visions. But, after all, are the teachers the leaders of society?

Seemingly not. In a book called *The Making of the Western Mind* we read this frank statement: "It will be understood at once therefore that education . . . is sequent and not antecedent to advances of the human mind in making discoveries or altering the constitution of society." This writer believes that "the educative process follows," but does not lead in "raising the whole man or the whole society to another level and accommodating its habitual response to new conditions and new stimulus." A former State Superintendent of Education likewise writes: "To the extent that an educational system functions properly, progress in the fields of industry, science, and art necessarily goes in advance of progress in the school system itself." Commenting on this alleged fact that educators cannot be looked to for leadership, another eminent thinker writes: "Evidence of the anomalous position of education in modern civilization is that, whereas people generally look to it for guidance, yet the gospel of 'service' evolved jointly by business and by the temper of democracy tends commonly to place institutions of learning in the rear, not at the head of the procession."

Why is it, one may ask, that education does not lead in modern civilization? Perhaps the answer is to be found in the fact that modern educators as a body are unable to formulate and agree upon the plan and purpose of an educational program. Certainly the confusion with regard to the outcome of western culture as well as the chaos that threatens the economic basis of modern civilization is also shared by modern education. An eminent contributor of an article on "Education" to Beard's *Whither Mankind* says that today, "There is little agreement concerning what should be taught, or how, or to what end, or as to the value of learning anything at all." To explain this condition he gives two reasons: (1) first, those in charge of our educational system have no idea of the meaning of education; (2) second, education as a profession, since it does not offer rewards for service commensurate with those offered by other professions, fails to draw to itself men with abilities sufficient to work out a noteworthy philosophy of education. As a result, says he, "Teaching becomes a kind of trade similar in a way to other trades, with an average quality of workmanship and standardized quantity production as its object." The author, Everett Dean Martin, therefore concludes "that everywhere in Western civilization, education is in a state of confusion."

If we examine some of the writings of those who have gained eminence in the educational world, we will find much to substantiate this author's view that education among the peoples of the Western world is "in a state of confusion." L. Thomas Hopkins, in a recent book called *Curriculum, Principles, and Practices*, does not hesitate to say that "There is no general agreement as to the aim or end either of formal education or education in general." Some, according to Hopkins, believe that education should be primarily concerned with culture, others with discipline, others with growth and development, and still others with "preparation for life, usually adult life."

Let us look at some examples. Education, as we all know, has more and more adopted the methods and concepts of science. As long ago as 1908 Charles Seignobos in his *History of Contemporary Civilization* said:

> "The soul of this civilization is science. Formerly it was only a pastime for choice spirits. Since it has formulated its methods and verified its results, it has assumed a practical role; it has become the guide of industry and of commerce, and has even begun to rule in politics. It has, therefore, become for all classes an instrument of education for the mind and for the character."

Such phrases as education for development and education to assure the adjustment of the individual to his environment show that naturalistic science is basically involved in stating educative processes and purposes. By science we mean here a body of classified information which the scientists build up by the method of experimentation and checking results. This scientific attitude involves the quantitative method of arriving at values, for only quantities are subject to exact measurements. Now, the modern educator, in order to measure results scientifically, has developed a considerable technique in the field of educational psychology. We have educational psychologists or psychologizing educators who, believing that every stimulus produces a definite and measurable response, have undertaken to reduce the processes of education to a matter of creating certain stimuli, presumably the kind children will be subjected to when they get out into society, so that suitable responses can be developed in the adolescent. Educators like Watson and Thorndike have worked faithfully in that field.

But what do we find critics saying about these seemingly well-favored methods of procedure among educators? Long ago Walter Lippman took Terman to task by asserting that psychological tests to determine one's intelligence quotient were beside the point because they reveal one's store of information but not one's capacity to learn. In an article in *The Nation* on "The Degradation of American Psychology" Benjamin Stalberg speaks contemptuously of these "half-wit metric movements in American Psychology," and denounces the methods and assumptions of a whole group of American psychologists. It is needless to point out the divergent opinions with regard to the stimulus-response theory of educational procedure for they are legion. One writer has facetiously said that if you give an educational psychologist of this type a rat and a graph, he will work out for you a whole philosophy of education.

Professor William B. Munro of Harvard has written an article called "Quack-Doctoring the Colleges" in which he soundly berates different manifestations of what he calls "the educational brand of hocus-pocus" in America. This educator attacks many honorable practices of educational procedure observed and carried out by other able educators in the school system of the day. Among those listed for special denunciation are the educators who advocate a

program of clarifying objectives, those who uphold the idea of giving beginning freshmen courses to orientate them in their new environment, and those who advocate the abolition of the lecture method of imparting instruction, and substituting for it "creative participation" on the part of the student. His whole attitude is summed up in this sentence: "Education does not succeed or fail on the issue of methodology, but on the capacity and the personality of the teacher himself." Anyone who has read after Professor Harold Rugg of Columbia, or has studied the Rollins' teacher-student conference method of instruction, or dipped into such articles as H. L. Donovan's "Changing Conceptions of College Teaching," H. Arnold Bennett's "The Limits of the Discussion Methods," or Hiram B. Loomis' "Educational Philosophy: Change, Invariance, or Both?" will soon begin to see the lack of harmony that exists among educators when they discuss methodology.

When we turn aside to study objectives, the same sort of confusion exists. Let us look first at the matter of specialization. We are told by those favoring specialization that modern civilization has an economic basis. Our educational system is faulty if it leaves its product unable to make a living in this modern, industrialized age. Therefore vocational education comes into prominence and our high schools are obliged to meet the demands of the time by constantly adding to the curriculum those practical courses which will train students "to get a job, to keep a job, to improve on a job, to get a better job, and to believe in their job." This doctrine seeks to eliminate from the curriculum the so-called non-essentials. The efficiency expert, posing as an educator, undertakes, for example, a series of experiments, and he finds out, say, that a pharmacist needs only seventy-one Latin words in his vocabulary. He is therefore taught only these seventy-one, and Latin, being no longer regarded as an essential subject to study in order to make a living, is dropped from the curriculum as a requirement. Its place therefore is given to high school courses in typewriting and office management.

Just at the moment when we have become thoroughly convinced of the value of specialization other voices begin to be heard. If we would teach a student to live as well as to make a living, we must develop within him a sense of a whole and not simply focus his attention on a part. Men like F. S. Marvin are saying with just a touch of pathos in their voices that "The power of seeing things whole, the calmness of long views, the persistence of great efforts, the confidence of lifelong devotion are at present less with us." Educators like Ludwig Lewisohn are lamenting the fact that young men are going to school "not to find truth, but to be engineers or farmers, doctors or teachers." They are seeking for "Skill and knowledge with which to conquer the world of matter." They are not looking for an "inner change—the putting on of a new man, a new criterion of truth, new tastes, and other values." Writers like Katherine Fullerton Gerould are saying that "Specialization is the persistent foe of culture." Thinkers like Everett Dean Martin are saying that

mere "economic efficiency," the goal of specialization, is not education, and that no man is educated who remains nothing more than a well ordered puppet "in the passing show trained to make gestures," but "with no reflection beyond problems of material advantage."

If asked to name the man who has exerted the most potent influence on modern education in America, we doubtless would name John Dewey. Dewey, like Cubberly, Colvin, Hopkins, Kilpatrick, and others, has advanced in numerous books and articles his particular educational panacea for saving the modern world. In a sense the other educators named have been more or less echoing principles originally stated by Dewey. Colvin has advocated educating the child for future environment; Cubberly has maintained that one must be educated to have a social understanding before one can render his best service to society. Hopkins has advocated that the individual becomes the best civilized product when he has been trained to do reflective thinking in meeting the situations that confront us all in adult society. And Kilpatrick, perhaps most outstanding of them all, has emphasized, in a recent book called *Our Educational Task,* that our present civilization has reached a crisis; that the old moral and religious sanctions are weakening; that the force of authority is being abandoned, and our basic institutions, the home, the church, and the state, are tending to disintegration, and for these impending disasters the panacea he has to offer is this: we must give up an educational program developed when society was static, and form a new program to meet the needs of a dynamic and changing civilization. In part this is a restatement of views expressed by him in his *Education for a Changing Civilization* published in 1926. Such are the views of these various educators, but these views, in a sense, represent a coining of new phrases and the emphasizing from a different angle the idea developed by Dewey many years ago that the child must be educated for "social efficiency."

In one of his recent books, *Character and Events,* Dewey shows the stand that he has taken all along in formulating his educational philosophy. "In short," says he, "our culture must be consonant with realistic science and with machine industry, instead of a refuge from them." Dewey, more than any other educator, has been convinced of the validity of the assumption that in the final analysis it is results that count. He has emphasized therefore in numerous articles the idea that a child must be educated in such a practical way that he will grow to adult life and take his place in society as a socially efficient human being, capable of producing results by virtue of the fact that he is trained in the skills and instrumentalities necessary for success in an industrialized social order the method and soul of which is science.

There are some who have gone so far as to consider Dewey "a national calamity." National calamity or not, Dewey has been a powerful influence in the education of this generation. Nevertheless, he seems to be beginning to lose faith, if he ever had it, in educational objectives. He, too, becomes con-

fused and the ready pen that has formed so many phrases of practical educational advice slips from the fingers of a disillusioned man. In his book, *Individualism, Old and New,* he denounces individualism as un-American; he says little or nothing of a definite nature about ideals that should inspire; and he advocates the paradoxical idea of "progress" without a goal. In fact, he designates "fixed and comprehensive goals" as "irrelevant dreams." There was a time when Dewey talked of the emancipated teachers who would train minds to be discriminating, minds preferring not to dupe themselves or be duped by others; there was a time when he dreamed of the possibility of schools becoming "dangerous outposts of human civilization." But disillusionment has arrived.

Though Dewey himself is today regarding "fixed and comprehensive goals" as "irrelevant dreams," yet his idea of educating for "social efficiency," and his belief that "our culture must be consonant with realistic science and machine industry" has left a definite impression on modern American civilization, and this fact is bemoaned by many. J. Milnor Dorey in an article on the subject, "Is the New Education New?" has summed up the attitude of many toward the philosophy of education now dominant in this country. "We are no longer interested in the liberty wanted by our forefathers and its corollaries—art, learning, culture, religion; we have become politic, economic, sociological." He holds that the idea of "getting results" has been borrowed by philosophers of education from the vocabulary of the capitalists. But getting results, as the term usually is meant, is not education. "It is training for purpose established by the needs of adult standardization. It is fashioning raw material to specialized ends. Each child must take a job and earn a living." "In training a child to live in the adult world we are forgetting that the adult world is not concerned with spiritual values, or creative impulses. Culture, taste, opinions, personality are granted assets if they contribute to productivity. But to consider them as integral to the educative process is sentimentalism." Says Dorey, "The machine idea of civilization is dead wrong, and our civilization will run amuck, as it is now running, until we change it. The machine is interested in a finished product."

I have called this discussion "Facing a Dilemma in Modern Education." That dilemma, if one may judge by the pronouncements of many professional educators as well as laymen, is, that those charged with the responsibility of leadership in the field of modern education are hopelessly confused concerning what should be taught and how to teach it. We who belong to the profession are faced with the problem of either educating the youth of the country to be efficient cogs in the great industrial machine so that they may make a living though they lose their souls thereby, or of educating them in the arts and humanities, thus leaving them unequipped to take their places as skilled products in a social order that measures achievements in terms of material results. Those who oppose this idea of making our educational products efficient

instruments to meet the demands of a civilization whose basis is industrial and economic, and whose methods of checking results purport to be scientific and tangible, tell us that our products are really not educated. They have, when they have left our schools, no conception of the meaning and significance of cultural and spiritual values. Our happy, optimistic June graduate faces a machine type of civilization which has made considerable leisure possible for him, but he is untrained to use that leisure as a cultured human being should. He is narrow and provincial; he is prejudiced and full of bigotry. He lacks tolerance and breadth of view. His culture is superficial and not an integral part of his nature. He finds his spiritual joys in cheap, commercialized forms of amusement and in reading newspapers and pulp paper magazines. He has no sense of the drama of man's great historic past. He is, in a word, a creature of physical appetites and devoted, for the most part, to neurotic indulgences.

It is not my purpose to question here the validity of such an indictment. There are others more qualified to show that we do have in America today a philosophy of education that is justifying itself by its fruits. We who are professionally interested in the education of the youth of America should take stock of ourselves to see where we stand and where we are going. And in our country today our great teachers colleges are the logical institutions to set the pace of leadership in the field of American education by agreeing among themselves upon a philosophy of education suited to the practical and cultural needs of our people in this generation.

THE HIGH SCHOOL SCIENCE LIBRARY FOR 1931-32

HANOR A. WEBB
(Editor of *Current Science*)
George Peabody College for Teachers

An eighth annual list of the newest books in the fields of science on the junior and senior high school level fills the following pages.

The plan of classification is that of previous lists[1] which have served libraries and science teachers. The *price groups* guarantee a diversified selection even for small budgets. (Each smaller price group is included in the next larger one.) The emphasis is placed on books that will be interesting to read. Texts and reference books are pushed into the large price groups, not because of lack of value, but to preserve the first purchases to those books that will supplement the texts and references—add life and variety to students' library assignments.

The division into fields of science reveals a popular interest at this time in *exploration,* with volumes that will provide vicarious thrills in plenty. Books on health never diminish in number. The flood of volumes on aviation seems to have passed its crest, and radio has settled to the status of a practical everyday science. There seems to be a dearth of "garden books" this year.

These are but a few of the characteristics of the "new shelf" in the science library. One great fact looms large, however—*publishers still have faith!* They have faith that eager children will not be denied the literature that is their due; faith that libraries, though handicapped, will still furnish enough patronage to encourage authors to tell their brave, interesting, or scholarly stories; faith that orders will be forthcoming in sufficient volume to keep editors alert and printers employed.

Their faith should be our challenge. A book that never is written is like a hero that never is born. The course of destiny, due for a change, may be

[1]The preceding lists in this series are:
"The High School Science Library—1910-1924," this Journal, Vol. 3, No. 2, 85-119 (September, 1925). Bound reprint, 25 cents.
"The High School Science Library for 1925" (1925-26), this Journal, Vol. 3, No. 6, 340-347 (May, 1926). Bound reprint, 10 cents.
"The High School Science Library for 1926" (1926-27), this Journal, Vol. 4, No. 6, 351-358 (May, 1927). Bound reprint, 10 cents.
"The High School Science Library for 1928" (1927-28), this Journal, Vol. 5, No. 5, 278-290 (March, 1928). Bound reprint, 10 cents.
"The High School Science Library for 1928-29," this Journal, Vol. 7, No. 1, 1-16 (July, 1929). Bound reprint, 10 cents.
"The High School Science Library for 1929-30," this Journal, Vol. 8, No. 1, 35-48 (July, 1930). Reprints exhausted.
"This High School Science Library for 1930-31," this Journal, Vol. 9, No. 1, 29-40 (July, 1931). Bound reprint, 10 cents.

unaltered and a social group—even society itself—may muddle on in its fetters. The publishing industry must not languish unless educated America is resigned to a "Dark Age" of little inspiration and less culture.

PUBLISHERS AND THEIR ADDRESSES

In the list that follows, publishers are indicated briefly; full names and addresses are here given:

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American Nature: American Nature Association, 1214 Sixteenth St., N. W., Washington, D. C.
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TEACHERS AND READING

J. H. DILLARD
Charlottesville, Virginia

I

During a wait some evenings ago in a railroad station a gentleman standing near waved his hand and ventured the remark, "That's the worst sight in America." I could not for the moment guess what he meant. I did not see what it was that he embraced in that wave of his hand—what it was that he condemned in that sweeping statement. I did not wish to be rude and ignore him, and I was looking for the worst sight in America, when he went on to say, "Well, I won't say absolutely the worst, but one of the worst. Think of feeding on that, choosing that food. But that must be what is wanted, or it would not be there." Then it dawned on me that my emphatic friend had waved toward the news-stand, which seemed more than usually brilliant with yellows and reds, pinks, greens, and blues.

For some years I myself had been growing into a state of mind approaching this. The gates were not opened, so I asked him why it should be so. "Oh," he said, "so many educated with no education, or not enough. They know how to read, yes, but read what? There you see it. As long as we have that exhibition we shall not get beyond Main Street." I should like to have had the opportunity of making further acquaintance and of knowing at least my friend's calling, but his gate had opened and with good-night he was gone.

His parting shot about Main Street made me wonder whether it would not be a good idea for the schools to have the definite aim of civilizing us out of the Babbitt circle and Main Street. To this end it seemed that perhaps the best way might be to concentrate for a while on the point of taste in reading. It might be a case of *ab uno disce omnia*. It might be that with better taste in reading would come a finer culture all around.

There is one fact I think we have to face—namely, that we have gone so far in general education that our only salvation lies in going farther. We must gladly pay the price of democracy. Judgment of the culture of the age of Pericles or of the culture of the age of Louis XIV, even that far down, may be based on the degree of culture of the enlightened small minority, but not so in our modern day. The judgment of our culture is bound to include the people at large. The great public have learned to read—something; we have learned to think—about anything to a certain extent; we have learned to appreciate—some things. A general culture of some sort is aloose, the leashes are off. Our tone is bound to be set by the extent and the quality of the thoughts and appreciations of the people at large.

We have gone so far that we cannot stop short of having culture of the people by the people and for the people, and we shall be judged accordingly. We ought to be. We entered upon the great adventure and we must see it through not only in government, but in education and culture. We cannot stop where we are. One is tempted to say, Better not to have learnt to read than to read and prefer so much of the colored matter over which my indignant friend waved his disapproving hand. For consider the amount of false sentiment, melodramatic virtue, strained smartness, and bad English on that news-stand, and almost any sweeping statement seems pardonable. Yet I think we need not feel the despair which showed on my friend's face. Is not the intermediate state, on Main Street, inevitable? We are on the road which will in time lead beyond. But to get beyond we must adopt certain improvements in our vehicles of advancement.

II

Education is the only way we know. If education is to embrace the whole population, it must be public education for most of us. It is a truism that only by public taxation can adequate financial support be supplied. And is not this the way in which it ought to be supplied? All the philanthropists and foundations together could not donate enough to do the job. We are already spending what seems in the aggregate a huge amount in public education, and we are finding this amount too small. To mention one item alone of forced economy, we are finding that the present amount compels the allotment of far too many pupils to the teacher. But even as it is, the amount spent is large enough to show that the public believe in, and depend on, public education as the basis of progress. That it should be set in the way of getting better results is the vital problem.

If there be one wish on which I suppose we all agree it is that our public schools should do their work well. There may be some disagreement as to what we exactly mean by doing the work well. Some might write the bill of particulars in a slightly different way from others. But would not all include some such program as this? First, the young people coming out of schools should have secured a fair amount of knowledge; second, they should have been set in the way, by habits of study and accurate thinking, of increasing this elementary knowledge; third, they should have acquired some appreciation of whatsoever things are true, beautiful, and good, and some power of discrimination between what is genuine and what is false in art, in literature, and in life. That is, the pupils should have been provided with elements of knowledge in the accepted branches of study, should have acquired the power to help themselves to further knowledge and its applications, and should have attained some growth in correct taste and conduct. In other words, we have a right to expect that the young man and the young

woman, after schooling, should have more knowledge, more power, and finer perceptions.

Now there is no doubt that after several generations of pretty general diffusion of school facilities people are beginning to feel some disappointment as to the results. We still believe in our great system of education. There seems no diminution of faith that the right results must somehow be attained. But there are notes of disappointment, and criticisms are heard that especially in the item of appreciation and discrimination our wide-flung education has failed. Whatever the criticisms may be as to increase of knowledge and ability to get on in practical ways, there is a very general feeling that the schools have somehow failed to beget in pupils the spirit of appreciation for those richer things in life which find expression in literature and art.

Perhaps we may reduce the demand to the single word culture, a word which has been much abused, but remains very useful and expressive. We may ask simply, Are the schools making due progress in creating for the young generation a background and an atmosphere of culture? We all say of course that this is the work of the home. But suppose the home itself lacks the ways of culture, cannot the schools make at least some amends? Is not this a reasonable expectation as a part of doing their work well? Is not cultured taste a part of education? Have we not a right to expect of education the cultivation of a taste for reading which would enable the graduate to choose that which is helpful and civilizing rather than what is prurient, shallow, and debasing?

III

I said we needed to improve our vehicles of advancement. I recall another incident. Several years ago two unofficial inspectors made a tour of visitation in high schools and teachers colleges, and in so-called normal schools, a name no longer popular. We saw much of what we judged to be good teaching and also much of what we judged to be poor teaching, but apart from the question of teaching we saw much, or rather the lack of much, which may be imagined from the following incident: We were visiting a class in domestic science in a large northern normal school. It was taught by a young lady who had graduated two years previously from another normal school. We happened to strike an hour when she was lecturing to the class. Her talk was interesting. I have no doubt she had her subject very well in hand. During the quarter of an hour of our stay in the room I had experienced a slight shock at three or four breaks, like "between you and I," but I was not quite prepared for the parting words. We were taking leave in the usual vapid way, excusing the interruption, expressing interest, etc., when she gave us an honest smile and said, "Oh, I don't mind visitors. I'm glad you folks come in." Now this young woman is an extreme perhaps, but still a type, of many men and women who are teaching in many parts of the country. They may be fine young Americans full of

ambition and good impulses, but they have little conception of all that part of life which is included in the term culture. Her speech betrayed her.

One more incident occurs to me. I was on a steamer with half a dozen young graduates of a teachers college all of whom had been booked for positions as teachers for the following session. I fell in with them and found them bright and alert. I happened to be rereading on deck John Stuart Mill's Autobiography, a book teachers should know, and I was surprised to find that not one of them had ever heard of John Stuart Mill. During frequent meetings I had other surprises too numerous to mention. The fact is that these young people, who were going to teach, knew little more of great literature and art than so many infants. It was not their fault, since they had never been put in the way of learning. Their diplomas had brought to them practically nothing of the qualities for which the word culture stands.

Of course it does not follow that the mere fact of being ignorant of the names of John Stuart Mill and Botticelli, or of the uncertainty whether Raphael was French or Italian, necessarily means the utter lack of culture. The name is legion of those who know the outlines of the history of literature and art, and yet have nothing of the spirit which gives life to the knowledge. Lists of names and dates are well, but they may be lacking without serious injury to the artistic appreciation and the satisfaction that comes from such appreciation. My young friends were surprisingly short of both outer and inner knowledge of the great men with whose work in the world they should have made at least some acquaintance.

Now why did these young teachers-to-be have so little knowledge of good literature and so little sense of its cultural value? They probably came from Main Street homes. But what had been done for them in the schools on the cultural side of their education? Our whole argument lies here. It happened that I was acquainted with the president of their school, a man thoroughly trained in methods and management, but without scholarship or culture. An up-to-date educator, full of energy and able in many ways, he yet lacked the thing needful. The fact is that, in the fine sense of the word, he was not really educated.

Why should we blink the issue that in the schools the precise need is for a larger supply of people who are really educated and understand what Alice Adams and Babbitt lacked. We shall go on producing Main Street so long as we neglect the element of culture in the selection of teachers who are to train teachers. The trouble is that this finer element has been neglected. We have built a great system, with all the machinery for teacher-training and with no end of attention to pedagogical psychology, but in the selection and training of teachers we have too much neglected the quality of cultured personality. It is this cultural personality which is the greatest need at the present stage of the great adventure of popular education.

ERASMUS DARWIN ON BOARDING-SCHOOLS

LEON H. VINCENT

Biography abounds in surprises. One always knew, or was supposed to know, that Erasmus Darwin, M.D., F.R.S., was the author of *Zoonomia* and of *The Loves of the Plants*. Yet it may easily have escaped one's notice that he also drew up *A Plan for the Conduct of Female Education in Boarding-Schools*. A thin quarto of a hundred and twenty-five pages, it was printed at Derby, for J. Johnson, St. Paul's Church-Yard, London. The date is 1797, perhaps the very year in which the wise and witty Jane Austen (herself the product of a boarding-school) began the composition of her first novel.

The book has been dealt with, so we are told, by deep thinkers on that intricate problem of the training of the young. We shall not do amiss to regard it as, in a way, a contribution to the history of manners. It has a documentary value, as have old letters, diaries, household accounts, and recipes. Besides getting no little amusement from its pages, we add something to our stock of knowledge of the way our ancestors lived.

There are forty chapters, or sections, in the work, most of them brief, the longest and last being merely an eight-page catalogue of books. Among the subjects treated are female character, music and dancing, reading, writing, grammar, and the languages; arithmetic, geography, and history; heathen mythology, polite literature, and the arts and sciences. A chapter is given to drawing and embroidery, and seven chapters to morals. Exercise, care of the figure—or, as they used to say, 'the shape'—dress, amusements, conversation, punishments and rewards, ventilation, diet, and economy, all have a place in this comprehensive manual.

A supplementary chapter, 'Apology for the Work,' tells how the book came to be written. The two Miss Parkers, presumably close friends as well as admirers of the author, had bought a house at Ashbourne in Derbyshire some four years since, and set up a boarding-school for young ladies. They were so fortunate as to secure excellent teachers in dancing, music, and drawing, from Nottingham, Derby, and Lichfield, together with 'a polite emigrant 'as French-master.' They also applied to Dr. Erasmus Darwin for any ideas he might furnish them with, on the subject of female education. The school having succeeded to their utmost wish, they then expressed a desire that he should give to the public what was originally written for their private use.

We learn from the author that a copy of the manuscript has been seen 'by many of the ingenious of both sexes, and much improved by their obser-'vations.' If the two Miss Parkers were generous in wishing to share with the world (including the mistresses of rival schools) that by which they had

profited, the amiable Dr. Darwin was no less so in acknowledging his debt to his coadjutors, 'the ingenious of both sexes.'

The present writer was so taken with the mingled naiveté and plain common sense of the treatise that he read it from cover to cover at a sitting, quite overlooking the dedicatory note that follows the title-page. It had a pleasing sound, that note, is perfectly characteristic of the age, and must be quoted in full:

'To the parents and guardians, who are solicitous about the education of 'their female wards and daughters,—to the governesses of schools instituted 'for female tuition,—and to the teachers of young ladies in private families,— 'this small work is with all due respect presented By the Author.' The last three words have a line to themselves, and are set up in double pica type (24 point). They make a brave show. One contemplates the phrase with envious admiration, and has an enlarged sense of the dignity of the profession of letters.

The picture of the ideal girl given in the first chapter will not appeal to the modern boarding-school miss, who, with all her charms, is apt to be more or less of a hoyden. 'The female character,' says Dr. Darwin, 'should possess 'the mild and retiring virtues rather than the bold and dazzling ones; great 'eminence in almost anything is sometimes injurious to a young lady.' He holds that too apparent strength of character is rather alarming, capable of frightening even the men. He prefers the pliant disposition to the robust. At the same time he admits that there are situations in single life (the school-days being over) in which a young woman is justified in cultivating to any extent the arts and sciences, whether for amusement or instruction.

'And there are situations in the married state; which may call forth all 'the energies of the mind in the care, education, or provision, for a family; 'which the inactivity, folly, or death of a husband may render necessary.' Women were not emancipated when this book was written, and more than seventy years were to elapse before the appearance of John Stuart Mill's trenchant essay on *The Subjection of Women*. The male of the species, however, was what he has always been, capable of inactivity and folly, and now and then so inconsiderate as to die. More was needed at such a juncture than a pliant disposition, blushes, and a pair of downcast eyes. Dr. Darwin frankly admits it.

In the chapter entitled 'Languages' our author is decidedly modern, holding, as he did, that Greek and Latin consume years of precious time which might otherwise be employed in the acquisition of sciences. Yet he was himself a scholar. Little enough time is spent on the classical tongues in the present age, and that little is in a way to become less. Dr. Darwin would have young ladies learn French and Italian. They are not so difficult as Greek and Latin, they contain the new books of taste and knowledge, they

are convenient for conversing with foreigners, and lastly, 'they are agree-'able as well as fashionable studies.'

He believes in the conversational method, it will be found successful with even the youngest children, and quotes John Locke in support of his position. The method is well adapted to schools because the small pupils, 'the 'infantine society,' learn 'many things besides language,' physiognomy for example. Grammar is too hard for very young minds, and may come later. He suggests an epitome of Lowth's *Grammar*, with improvements by Mr. Horne Tooke.

'The Rudiments of Taste' are to be learned, first, from books that treat professedly of the subject (Addison, Akenside, Burke, Hogarth, Mason, and Wheatley), second, by the study of admired passages from the best authors, and third, by prints of beautiful objects and casts of the best antique gems and medallions. Objects of Taste (he notes) have hitherto been divided into the Sublime, the Beautiful, and the New. Of late a sect has arisen proclaiming the doctrine of the Picturesque. The reference is to Uvedale Price, whose book, *An Essay on the Picturesque*, had appeared in 1794. Price attached a particular meaning to a word that has long since become current coin, and coin of no fixed denomination. When in need of an adjective we find 'pic-'turesque' as handy as the next word. Darwin must have seen the work, he has the air of doubting whether the thesis be sound.

The chapter on 'The Heathen Mythology' is amusing. The subject is connected with the study of taste, 'and should therefore be taught in boarding-'schools; as without some knowledge of it the works of painters, statuarists, 'and poets, both antient and modern, cannot be understood.' But there is need of caution. A great part of mythology consists of personified vices, and 'much care should be taken in female schools, as well as in male ones, to pre-'vent any bad impressions, which might be made on the mind by this kind 'of erudition.'

Dr. Darwin's plan is simple. The difficulty is to be met by explaining the allegorical meaning of many of these supposed actions of heathen deities. Everybody knows that mythology will stand a deal of allegorizing. The deities were notorious for loose conduct, and the governess had her work cut out for her who should attempt to explain some of their capers.

The chapter on 'Polite Literature'—a comprehensive and delightfully old-fashioned phrase, by the way—is one of the longest in the book, actually running to nine pages. Four kinds of writing are recognized, Dissertations (what we now call essays), Plays, Romances, and Poems. As examples of the first we have *The Spectator, Tatler, Guardian, World*, and similar papers, all too well known in Darwin's day to require anything beyond a mere mention of the name. Plays are classified under three headings, 'tragical, senti-'mental, and humourous.' Addison's *Cato* and the tragedies of Thomson

'consist of fine language.' They do indeed, much too fine the modern reader would say. Cumberland's comedies illustrate the sentimental in dramatic composition, and Sheridan's the humourous. Darwin was not advertising a new playwright when he spoke of Sheridan. *The Rivals* had its *première* twenty-two years before this little manual for boarding-schools was compiled. It seems incredible. There is almost nothing of the Eighteenth Century about the play except the date.

Our mentor takes up the question whether young ladies should be taught to act in plays themselves, as is done in some boys' schools. He has his doubts. 'The danger consists in this, lest 'the acquisition of bolder action, 'and a more elevated voice, should annihilate that retiring modesty, and blush-'ing embarrassment, to which young ladies owe one of their most powerful 'external charms.' But he would allow them to repeat scenes from plays, provided only the parents and two or three friends were present.

He divides novels or romances into three groups, the Serious, the Humourous, and the Amourous. 'Of these, the use of the last should be in-'tirely interdicted; but the first, when well managed, may convey instruction 'in the most agreeable and forceable manner.' At the present day nothing is 'intirely interdicted,' and the demoiselles of the period (whether watched or not) will read the worst of novels with a calm that borders on the preternatural. 'It was not so in the good old days,' according to a line in a once popular song.

The classification of novels is followed by a list—not meant to be exhaustive—of fictions that may with safety be placed in the hands of the budding maiden or the mature young lady. *Sandford and Merton* is among them, also *Tales of the Castle, Robinson Crusoe,* and Moore's *Edward;* but not Moore's *Zeluco,* a classic in its way though now entirely neglected. Mention is made of Miss Burney's *Evelina, Cecilia,* and *Camilla,* of *Emmeline and Ethelinda* by Charlotte Smith, of Mrs. Inchbald's *A Simple Story,* and of *The Female Quixote* by Charlotte Lenox, one and all the productions of 'ingenious ladies.'

Darwin grants that the humourous novels, which are not written to inflame the passions, convey instruction in so far as they depict real life, *Gil Blas* for example, and *Tom Jones.* But neither of these is a proper book for young readers. Convinced that all novels contain passages that ought to be expunged, and that too much novel reading is bad, he will not go so far as to prohibit *in toto* this type of literature. One learns something by it. The knowledge may prove startling, may even bring a shock. 'But,' he exclaims, 'are young women therefore to be kept in intire ignorance of mankind, with 'whom they must shortly associate, and from whom they frequently chuse a 'partner for life? This would be making them the slaves rather than the 'companions of men, like the Sultanas of a Turkish Seraglio. And how can

'young women, who are secluded from the other sex from infancy, form any 'judgment of men if they are not to be assisted by such books, as delineate 'manners?'

The incident he gives to illustrate and support his view stirs us to mirth. It relates to an heiress who had been persuaded to marry the man of her people's choice, and afterwards found him to be disagreeable and selfish. Speaking to a friend of the ill-humor of her husband, she lamented that she had been forbidden to read novels. 'If I had read such books,' said she, 'before I 'was married, I should have chosen better; I was told that all men were alike 'except in respect to fortune.'

The section on 'Arts and Sciences' has a modern note. As the author of *The Loves of the Plants* (with copious Notes), a poet who was at the same time a man of science, Darwin would be for more than a sentimental interest in flowers. He wants young ladies primed with facts, and tells them how to go about it. The works of Linnaeus had been translated by a society in Lichfield, and were available. So too were Lee's *Introduction to Botany* and Miss (or Mrs.) Jackson's *Botanical Dialogues for the Use of Schools.* He does not forbear to remark that the philosophical part of the subject may be agreeably learned from the notes to his own *Botanic Garden,* 'whether the poetry be read or not.' Horace Walpole liked the poetry, arch-railer though he was. It is now the custom to mock at it—without, however, taking the trouble to read it first.

For chemistry Darwin advises certain elementary text-books by Lavoisier and others. Three years only had elapsed since the great French man of science had perished by the guillotine. Darwin makes a touching allusion to Lavoisier, whose death was an irreparable loss to the world. An occasional remark of this sort, a simple passing word, gives this little manual a documentary value.

The modern note comes out again in the recommendation that astronomy, hydrostatics, mechanics, and optics, 'with the curious addition of electricity 'and magnatism,' be acquired by attending lectures in experimental philosophy such as are occasionally given by itinerant professors of those recondite subjects. It had not occurred to the present writer that the peripatetic lecturer was at large at so early a date as 1797. Darwin thought that young ladies should know something of the arts and manufactories 'which adorn and enrich this country;' the cotton-mills on the Derwent, the potteries in Staffordshire, the iron-foundries in Shropshire, the various industries of Birmingham and Manchester. Such studies do not fall in the province of a boarding-school, illuminating as they must certainly be, and our author suggests that the parents of the young ladies take them about in the summer vacation.

The chapters on 'Exercise' and 'Air' bring out two points—namely, that what is today called physical culture was in its infancy, if, indeed, it could

be said to exist; and that the value of a plentiful supply of fresh air was beginning to be generally recognized. Bedrooms and schoolrooms ought to be well ventilated, and young ladies should be encouraged to amuse themselves out of doors. 'A constant immersion in pure air is now known to con-'tribute much both to the health of the system, and to the beautiful colour of 'the complexion.' When advising the frequent renovation of the atmosphere in schools and dwelling-houses, Darwin uses the then current phrase 'vital 'air,' meaning oxygen. Priestley had discovered this gas in 1774, but the six-syllable descriptive adjective he applied to it had a formidable look. Condorset's 'vital air' was the popular designation.

In dealing with such distinctively feminine topics as 'Dress' and the 'Care 'of the Shape' our author is courageous and resourceful. He believes that young ladies should be encouraged to pay attention to what they put on their backs. (We have yet to learn that they were ever indifferent to the matter.) An elegant simplicity is to be preferred to a superabundance of ornament. The form of the dress must necessarily vary with the fashion of the time, but one need not go to extremes. 'When large hoops were in general use, 'which so totally militate with all ideas of beauty and grace, ladies of taste 'wore them as small as custom would allow.' And they were equally careful in respect to the ear-rings of the present day, 'an indecorous fashion,' reminding us of the savage state of mankind. Long, pendant, and complicated ear-rings, however they may add to the dignity of riper years by their costliness, are unbecoming to young ladies.

Darwin is prepared to nod approval when the appearance of utility in dress suggests an excuse for wearing certain ornaments, a diamond pin, a string of pearls, a tortoise-shell comb, et cetera. 'Other ornaments, which bear no 'analogy to use in dress, should be sparingly worn; lest they give an idea, 'that they were designed to display the pride of the possessor, rather than to 'decorate her person. These are sometimes seen so ill placed as to make de-'formities conspicuous, as a number of rings on fingers distorted with gout, 'or splendid buckles on turned-in feet.'

The Doctor has for a moment dropped girls to take up dowagers, a type that he evidently viewed with a complacent eye, but only when the figure, bearing, and costume agreed with his ideal. He gives a sketch of one, a magnificent creature, with white ostrich-feathers rising on her head and a train of silk sweeping on the ground behind. Not entirely hygienic, that train, but adding the element of beauty which 'consists of lines flowing in easy curves, 'according to the analysis of Hogarth.' Possibly the lady was addicted to white hair-powder and rouge, a venial sin in a dowager. But 'paint and pow-'der are wholly inadmissible in the dress of young ladies,'—for reasons that are specified.

By no means the least instructive part of the manual is to be found on

the last page, a statement of the terms on which the Miss Parkers will accept pupils. We learn what it cost in 1797 to educate a daughter. Board for the year (presumably the academic year) came to 18 pounds and 18 shillings. The sum might as well have been 19 shillings, but the heads of the school understood their business. They knew the feminine instinct for a bargain, and how most mothers would be caught by a rate that lopped off a couple of shillings from the last pound. The entrance-fee, however, was 2 pounds, *plus the shilling lost on the board-bill.* The Miss Parkers were adroit.

The third item reads, 'Tea, if required, per quarter, 10 shillings and six-'pence.' Tea is always required. The most unreasonable parent can have taken no exception to this charge. Nor to the next one, which reads, 'Wash-'ing, per quarter, 14 shillings.' Were the value of money then what it is now, the charge would amount to barely a dollar a month. How could it be done otherwise than by making slaves of the servants? And slaves they were, but used to being so.

For instruction in geography there was a fee of 10 shillings and sixpence per quarter. This fascinating branch of learning seems to have been regarded as a luxury. French (under the 'polite emigrant'), music, dancing, and drawing were all extras; the charge for each was fixed at a guinea. The pupils were not to arrive empty-handed in the matter of equipment. 'Each young 'lady is required to bring one pair of sheets, two towels, a knife and fork, 'and a silver spoon.' One is reminded of the proud and doting father whose efforts in behalf of his precious child are celebrated in an early poem by Oliver Wendell Holmes:

> He sent her to a stylish school;
> 'Twas in her thirteenth June;
> And with her, as the rules required,
> "Two towels and a spoon."

The two towels and a spoon may have been a customary offering on arrival, and in a way symbolical, a proof that the young lady belonged to a family inured to the use of such articles. The coincidence between the line in a satirical poem and a similar line in the Miss Parkers' announcement is both odd and entertaining. We need be under no apprehension as to a pupil's well-being and comfort. The ladies of Ashbourne would never restrict a girl to the single pair of sheets that she brought from home.

This little work is filled with suggestive matter. It deserves a reading if only because of the clever man who wrote it. The author is pedagogue, family physician, censor of manners and morals, arbiter of fashion, and scientific enthusiast all in one. Often quaint, he is always sensible. His remarks on compassion, veracity, prudence, justice, fortitude, temperance, and the like are always pointed and often quotable. He is precise, going into such minutiae as the proper position of a pupil at her desk when writing, the manner of

holding the pen, the expression of the countenance. As a matter of fact there is very little that he does not touch on, whether it be rewards and punishments or lisping, squinting, and kibed heels.

A capital essay might be based on the really unpretentious volume. Whatever form the essay took, it would have a certain value. It might be a study of the type of school and governess that was in full flower in 1797, and which (in a greatly modified form) still exists. One may see—in a town like Folkstone for example—the girls returning from church on a pleasant Sunday morning in early June, the column headed by a couple of teachers and two more for the rear guard. 'Such a silly little school,' said an American girl who was placed in one while her parents toured the Continent for a winter. And those silly little schools taught their pupils to speak the English language idiomatically and to write it with grace and charm. Now and then they turned out a Jane Austen or a George Eliot.

The essay, with Dr. Darwin's book for text or point of departure, might take a philosophic form as well as a historical. Certain theories about the training of the young were in the air. The manual brings them out to a certain extent. We should like to know in what degree the Doctor was influenced by ideas that had become (or were becoming) common property, and what part of the treatise was his, and his alone. Such a study should be written by an educational expert. It should be as scientific as the endowments of the writer will permit and as the needs of the present day demand. At the same time the touch need not be heavy. As Lowell once remarked, 'a 'thought is none the less profound because the limpidity of its expression al-'lows us to measure it at a glance.'

THE TEACHERS COLLEGE IN RELATION TO THE TRAINING OF SCHOOL LIBRARIANS

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Some four years since, there was carried on at the University of Chicago a series of studies relating to the curricula of library schools[1] and eventuating in the preparation of textbooks suited to such curricula. One of these studies had to do with the curriculum in school librarianship.[2] Those of us who were connected with the study discovered very soon that our chief difficulty lay, not in the organization of materials for the instruction of the school librarian, but in determining the functions of such a librarian. The techniques of librarianship had already been pretty well defined and standardized. Our task was to determine (1) whether the functions of the school librarian were essentially different from those of other librarians, and if so (2) how standard practice could be modified, adapted, and welded into a special curriculum in school librarianship.

I cannot go into the ramifications of that study. For present purposes it will suffice to present, almost in outline form, the conclusions finally arrived at and their outcome in a textbook.

Briefly, then, we had first to consider the functions of the library—any library. Dean Hawks of Columbia has defined a library as "knowledge made accessible." This is sufficiently comprehensive if you define knowledge broadly enough. But to clarify our thinking we shall probably want to add that it is the function of the library not only to make knowledge accessible, but to enrich the experience of its patrons through reading.

Given this definition of a library, the librarian becomes a liaison officer, a quartermaster, a purveyor or press agent of literature—what you will, so long as you think of him as the channel through which the storehouse of printed information on the one hand is made accessible to, or, to use a common phrase, is "sold" to, the public on the other. Nor does the basic function of the school librarian differ essentially, unless perhaps in the tendency to emphasize the selling function, otherwise known as reading stimulation or reading guidance. The problem of school librarianship is not, therefore, the development of a new science or art of librarianship, but the adaptation of standard practice to meet the school situation. The school librarian is a "special" librarian, ranking with hospital librarians, business librarians, college librarians—the

[1]The American Library Association Curriculum study under the direction of Dr. W. W. Charters.

[2]Fargo, L. F., *The Library in the School.* American Library Association. 1930. (Library Curriculum Studies.)

entire group of librarians who, by reason of a particular clientele, must adjust skills and standard practice to the specific situation. In the case of the school librarian we have one who is expert in serving a group composed of pupils and teachers engaged in the organized pursuit of education.

This is school librarianship undefiled. If, in any given school, the duties of librarianship must be combined with those of the classroom teacher, our problem is more confused—or rather, more complicated as to training, for the individual concerned must obviously be familiar with two sets of skills—those of the organizer and distributor and those of the instructor.

For clarity, let us at first disregard this hybrid person, the part-time or teacher-librarian, and confine our thinking to the one whose duties do not involve classroom instruction. What then is comprehended in the two outstanding functions of school librarianship: making knowledge accessible to teachers and pupils, and enriching the experience of boys and girls through reading?

During the last fifty years, librarians have been busy building up standard patterns of procedure. Whether or no this process is sufficiently advanced to constitute a science may be an open question. But by common consent we habitually speak of "courses in library science." The acquisition and processing of printed materials has, for example, been so systematized that we can say what is good practice and what is not; and the prospective librarian may learn from a text[3] as well as from observation and experience in the college library, how and where to order books to secure the best service; how to secure the most liberal discounts, the most serviceable binding and excellent typography, out-of-print titles, desirable editions.

All this is obviously an important part of making printed knowledge accessible. But it is only the beginning. The librarian must also know how to record and prepare for service the materials received. This involves making a business record; setting up a binding system; classifying, cataloging and indexing.

But the librarian should not be limited to the materials immediately under her hand. Organizations of a professional or research character, state departments, the Library of Congress, even international associations and institutions, all offer service, lending and exchange privileges, co-operative opportunity. When the dramatic teacher comes in to look up the correct costume for an Aztec princess, time and money will be saved if the librarian knows that a picture may be borrowed from the art museum or that the state library will temporarily lend a Smithsonian report. This is not a far-fetched example. It is in being able to meet just such unexpected demands, demands which may arise at any moment, that the school librarian proves her value. Her

[3]Drury, F. K. W., *Order Work for Libraries.* American Library Association. 1930. (Library Curriculum Studies.)

course in librarianship will, therefore, include a study of agencies outside the school which can be expected to co-operate in making knowledge accessible.

It is obvious that making printed materials accessible also comprehends knowledge on the part of the librarian of equipment for the adequate display and effective servicing of library materials. How long and thick should a shelf be not to sag? What is the size of a standard filing tray for Library of Congress cards? What equipment is needed for the work room? For the repair of books?

More obviously still, the librarian is bound to be expert in the use of the tools of research, and co-ordinately, must be cognizant of a variety of such tools. Most unfortunate the school whose reference boundaries are circumscribed and comprehended by an encyclopedia (or perhaps two or three) and the *World Almanac*. Valuable books indeed! But not calculated to stir the interest of the boy who wants to know how to build a canoe, or of the girl who is assigned the glove in relation to chivalry.

When we get over into the field of the librarian's duties in connection with the enrichment of experience through reading we admittedly approach, if we do not actually overlap, the functions of the classroom teacher. Here there is no sharp dividing line, no exquisite delimitation of function. But one thing does stand out. While the instructor is bound to know expertly only one field of printed information, or perhaps two, the librarian must have a speaking acquaintance with all. Not for her to say, "I never studied music and therefore I cannot indicate what musical biographies would be most useful to the boy who aspires to be a concert singer." No, indeed! Instead, by ways known to librarians, she discovers the pathways to music and hands out David Bispham's *A Quaker Singer's Recollections*.

I shall go no further. If you will take the above skills and match them against the courses commonly offered by library schools, you will begin to see the reason for what sometimes appears to be a rather elaborate curriculum, especially if, as perhaps you yourself assert, the librarian must be first of all a teacher.

So much for training on the side of librarianship. The next point is the matter of adjustment to the school situation; and such adjustment of courses presupposes familiarity on the part of the librarian *with* the school situation.

Here is where the teachers college and the teachers college library enter the picture. Up to this point, training may have been carried on in any institution where faculty, equipment, and library facilities were available. But the teachers college and its library offer a peculiarly fitting background for the orientation of the school librarian.

In saying this we shall not overlook two important facts: that the prospective school librarian's own personal experience as a school pupil gives valuable clues to the educational process, as does also teaching experience. In-

deed, these clues constituted practically the entire chart by which our earlier school librarians guided their courses, many of them with brilliant success. But this is the era of specialization. The rapid rise of the teachers college evidences acceptance of the principle that education is in itself a science. Accordingly, the conclusion as far as the school librarian is concerned is clear. Her training as a librarian is wisely combined with or built upon pedagogical training. And if we examine the curricula commonly recommended[4] we shall find that they bear out this conclusion.

Reasonably, then, we ask our prospective school librarian to prepare herself on the pedagogical side before undertaking the mastery of special library techniques which must be adjusted to the educational situation. It is a little difficult to prescribe exactly, for both education and librarianship are many sided and are carried on at varying levels all the way from the kindergarten to the high school—and the student frequently does not know on what level she may land. Safety for her seems consequently to lie in courses providing a rather general pedagogical background: educational psychology, the principles of education, educational method (in survey), social control or classroom management.

Such courses, plus the observation that goes with them, are, or should be, open to the librarian in the teachers college. It is not at all certain, however, that the presentation of such subjects on the same plane as their presentation for teachers is altogether satisfactory. While the classroom teacher needs a detailed teaching method, the librarian profits most by an overview, for her function is not classroom management, but co-operation with the classroom teacher and her pupils. The teachers college hoping to prepare librarians may therefore well consider the organization of a few survey courses in education under instructors who are cognizant of the true nature of the librarian's work.

The library school, or department of library science, will on its side realize the constant need for adjustment. Its courses in administration will emphasize administration within the school; its courses in book selection will take cognizance of the age levels of school library patrons; its courses in reference will indicate how reference work may be conducted to further the development of initiative and the research attitude on the part of the pupil. It will itself present at least one methods course designed to prepare the librarian to actually teach one subject—namely, the use of books and libraries.

We need not here run the gamut of the entire library science curriculum. Suffice it to say that everywhere the presentation of library techniques will be shot through with applications to the educational processes of the school.

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[4]American Library Association. Board of Education for Librarianship. *Standards and Curricula in School Librarianship.* A. L. A., 1927.

And now what are the implications of such a program with reference to the teachers college and its library?

Some of the implications have already been covered. But there are others. First, the college is bound to discover instructors who are skilled in the dual fields of education and librarianship. This is no easy task, for the union of these two fields is comparatively new, and financial rewards are often not commensurate with the training and experience required. Excellent librarians are to be had, but perhaps they cannot instruct; and excellent college instructors may know very little of library science. Teacher-training institutions will for the present have to search long and pay well for the desired specialization.

When we come to the teachers college library the implications of a library training program are crystal clear. First of all, the library must be an example of effective organization for educational purposes. It should be staffed with professional librarians who in their own contacts with college instructors and librarians-in-training in the library school demonstrate the adjustment of library service to educational ends. For it must not be overlooked that the library school uses the library as its exercise ground. Every library school combines theory with practice; daily lessons in reference, for example, are followed up with problems to be worked out in the library.

Another matter which is vital, but which, as Dr. Rosenlof clearly showed in his recent study,[5] is frequently overlooked by the teachers college library, is the presence of an adequate and well-organized boys' and girls' collection, presumably in charge of an assistant who is a specialist in her field and who knows how to make the collection an effective agency in the training of teachers and librarians alike. How are school librarians or the teachers they work with to direct and enrich the reading of pupils without the opportunity to become familiar with an excellent assortment of books written at the boy and girl level? This collection is the reading laboratory of the library school; it should also be the laboratory of the teachers college in all problems having to do with the choice of reading material for boys and girls.

A third essential in the set-up for library training is the training-school library. In the smaller institution this may be combined with the laboratory collection just described. But ideally there should be two collections—first, because their functions are different, and, second, because of the old law of physics that two bodies cannot occupy the same space at the same time. If the boys' and girls' laboratory collection is in constant use (as it should be) by teachers and librarians in training who are browsing, reading, preparing lists and working up assignments, it cannot be simultaneously filled (as it should be) with boys and girls from the training school who should be al-

[5]Rosenlof, G. W. *Library Facilities in Teacher-Training Institutions.* Teachers College, Columbia University, 1929, p. 70-77. (Contributions to Education No. 347.)

lowed to demonstrate by their activities and the activities of the librarian in charge, the effective administration of the library within the school. The training school should therefore have its own library. And this library should by all means be in charge of a school librarian who is just as expert in her field as the training school teachers are in theirs. To this library students of library science will be sent for observation and practice. In it they will learn better than anywhere else the adjustments essential to successful school librarianship.

So far, we have been discussing primarily the set-up for the training of the full-time librarian. But the commonly accepted standards for library service in the school contemplate part-time library positions.[6] What can the teachers college, its library, and its library school do to meet this situation?

In the first place, it must recognize that standards have in many sections outstripped organized community library service. They have also outstripped the financial ability of the rural school unless one of three situations exists: (1) Consolidated school districts, (2) consolidated library service in the county or township library serving both the adult community and the schools, or (3) consolidated library service for schools only, administered through the office of the county or district superintendent of schools.[7] In any of the above situations it is probable that the pooled financial resources of the district will be sufficient to cover the purchase of an adequate book collection and to employ the services of an experienced librarian, who, in the guise of supervisor, director, or county librarian attends to the organization and distribution of the book collection throughout the district, relieving the librarians in the schools of the greater part of technical and organizational work such as ordering, classifying and cataloging, and the processing of books preparatory to circulation. Under such conditions, the supervising librarian must have full training; but the part-time or teacher-librarians in the schools chiefly need training in the selection and use of books for educational ends and in methods and devices for the school library.

It is my personal conviction that in the long run we shall very generally have to come to some such arrangements if we are to secure anything like a satisfactory library development in the small school. But in the meantime, consolidated library service is the exception rather than the rule, and the standards proceed on the theory that the part-time or teacher-librarian must perform *all* the functions of librarianship from cataloging on.

To meet this situation, we have, all over the country, short courses in librarianship, especially in connection with teachers colleges. Like the Red Cross

[6] Association of Colleges and Secondary Schools of the Southern States. *New Library Standards for Secondary Schools.* Association, 1929.

[7] The first and second have passed the stage of experimentation. See Fargo, Lucile F. *The Superintendent Makes a Discovery.* A. L. A., 1931. The third is still a highly experimental enterprise.

first-aid courses which we all learned to know during the war, they serve a useful purpose in an emergency. But even at that they presuppose expert instruction from a staff not overburdened with regular library duties. They also presuppose the presence in the college library of the same facilities for observation and practice as those required by the full-time library student—namely, generous collections of books for boys and girls and a library set-up in the training school demonstrating best practice. More than that, the teachers college library itself must be constantly on the alert to suggest tools and devices valuable to the school library. Of this phase I know of nothing so complete as the work now being done in Columbia Teachers College Library; exhibits of all sorts introducing teachers and librarians in training to pictures, maps, and other visual aids obtainable at small cost; printed lists from everywhere accompanied by notes telling where to get them or explaining that they may be purchased for a few cents at the library desk; open shelves; constant publicity through posters and the weekly publication of the library.

But to return to the abridged curricula for the part-time librarian. They are too familiar to need explanation. They are based on elimination: elimination of all complicated forms so that the librarian may quickly compile a catalog; elimination of all bibliographic aids except those available at small cost; excision of courses dealing with the larger aspects of library co-operation; limitation of titles considered in reference work to those available in the small school; abridgement of book selection courses, for obviously the student cannot read or review very many books in six weeks or twelve.

Undoubtedly such curricula prepare the part-time librarian to substitute order for chaos in the school collection and to save the district money on its orders. But it will not take her much further, for these duties will consume the better part of her limited time. As a matter of fact, the mastery of these processes has probably taken so much of her time, even in library school, that how-to-do routines have overshadowed the functions of guidance and research of which they are the tools. In short, abridged curricula have the faults of all short-cut curricula. And yet they very generally have the power to so arouse the student's interest that she wants to go on and become a full-time librarian. Here the shoe pinches again, for her short-cut courses will not give her advanced credit on the full-time curriculum. Consequently she must start all over again.

In view of such difficulties, Peabody College library school is experimenting with an arrangement of its full-time curriculum which concentrates basic techniques in the first quarter, including a course in library records and methods which prepares the librarian to carry out the physical and business organization of the book collection. In book selection and reference, emphasis is upon criteria and basic tools. In the complicated processes of classification and cataloging the student makes but a beginning. But she is made acquainted

with correct form and standard tools. In the course of the quarter she is introduced to the literature of professional librarianship. With such a start, plus the personal guidance of her instructors, to whom she comes very close in the carefully supervised work of the school, may she not be as well fitted to carry on successfully in her small library as her sister who has hurried through an abridged curriculum? Is this not especially true in view of the fact that there are now available many excellent little manuals on the organization of the small school library which suggest all the short cuts and provide her with simple patterns for essential processes? If it seems wise, the library school may even allot several class periods to the consideration of these tools and to giving practical advice to the prospective part-time librarian who must cut her coat to suit the cloth. And if she finds librarianship stimulating and desirable, she may return to the library school another quarter and another, building on the initial basic curriculum until she has completed a full year's work fitting her for the full-time position to which she almost invariably aspires if she is an excellent librarian.

This is our present plan for the part-time librarian who must personally accomplish all library organization within the small high school. To her more fortunate sister working part time under supervision in a centralized system where technical processes such as classification and cataloging are cared for in a central office or perhaps the public library, we are giving the opportunity of pursuing as minors the subjects of which she stands most in need—namely, book selection and reference.

What is the part of the teachers college and its library in the training of school librarians? First, to determine the function of the library and the librarian with reference to the process of education. Second, to build the training curriculum around functions, chief of which are making knowledge accessible and enriching experience through reading. Third, to provide a faculty which is at home in the dual fields of education and librarianship. Fourth, to provide a library laboratory in which students may learn by observation and practice. Fifth, to regard courses for the training of the part-time librarian as more or less experimental or temporary, looking toward the day when part time may become full time under some form of regional library consolidation.

It does not take exceptional discrimination to discover that this is a large order and that every step in the program is due to be considered with care. Only so can the teachers college hope to develop a library training program of permanent value on a plane commensurate with the growing importance of the library in the school.

OBERLIN GRADES ITS STUDENTS IN THE REGISTRAR'S OFFICE

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Educational Administrative Ideals, which are really nothing but applied psychology, swing from one extreme to the other, like a pendulum, or like the business cycle. A century ago, when colleges were small and every teacher was intimately acquainted with every student, the student received his degree after having spent four years in college, provided he had not engaged in too many pranks antagonizing his teachers. But since the teachers did not want to acknowledge their personal sympathy or antipathy as being the decisive factor, they administered an ordeal which went under the name of a comprehensive examination before letting the student "commence" whatever was to follow.

Fifty years ago that patriarchal method became untenable, because both the teaching body grew, into the hundreds, and the student body grew, into the thousands. So the intellectual maturity of the students had to be determined by something more substantial than Pythian oracles or Medieval ordeals. The function of the modern college registrar was the outcome of this necessity. He added up the weekly semester hours for which the student by his numerous teachers, whose exact number then played no role, was reported as having a satisfactory performance record in recitations—until he counted 120. This educational achievement test given by the registrar has been roundly denounced in later years. Yet those who make sport of indicting it for all kinds of educational crimes, seem to do so mainly because they expect of it all kinds of services for which it never was designed. I am sure I do not know if the reintroduction of the ordeal of the comprehensive examination is in the interest of social progress.[1]

Most colleges, in addition to giving degrees, give away various other things, but only to a select fraction, by no means to all, of their graduates. These other things are either monetary gifts of various amounts, or they are social prestige of a variety of descriptions. In order to make these selections among regular graduating students, some kind of a quantitative basis was needed by the college faculties and was found in a thoughtless custom which some (many, most?) college teachers had carried with them from the time when as little boys they were learning arithmetic in grammar school. Very naturally their teacher had often given them arithmetic examples to solve and had recorded that they had so far advanced in the mastery of the prin-

[1]Compare "Examination or Transcript" in Peabody Journal of Education, March, 1932, pp. 302, 303.

ciples of subtraction, or what not, that of fifteen examples nine had been done correctly. For ease of recording, the teacher had written down 60—that is, 60%—rather than nine in fifteen. Many a college teacher had superstitiously carried this custom with him into his own collegiate teaching practice, for the possession of collegiate intelligence does not necessarily exclude a certain amount of superstition. We see at once how it came about that the registrar was now burdened, in addition to recording marks of passing, also with recording 60%, 75%, 98%, and like numbers for the several semester hours. Money gifts and prestige gifts were now easily distributed.

Then it dawned upon some faculties that a college student's daily or weekly or monthly work cannot be broken up into units like a child's arithmetic test into so many samples. So they declared that the professors should report to the registrar's office rather A, B, C, D, E, F, G, like a musical scale. But back from the registrar came the terrific complaint, in the form of a question: What are the quantitative data?

The University of Missouri was one of the pioneers in theory, and it was the pioneer in practice, showing that rank—and nothing but rank—is the estimation which the average college teacher is capable of assigning to his students. But are rank numbers not enough? From specific ranks of an individual student, his general, or average, rank is easily computed, and the registrar then can give advice for the distribution of money prizes and prestige prizes, selecting those of the highest average rank.

But then, twenty-five years ago, the faculty members were so strongly in love with the A, B, C method of reporting to the registrar that the idea of reporting all the passing students in a rank list and nothing else could not take hold at all. So we compromised and merely agreed that the faculty members should feel morally obliged to keep, in the long run, over many years and with average classes, the A's, B's, C's, etc., as close as possible to certain ranks per cent; for example, that in the long run the lower limit of the B grades should not fall below the twenty-fifth rank per cent, nor the C grades below the seventy-fifth rank per cent. Essentially this is of course a method of ranking. A great improvement in uniformity of grading was thus obtained. The agreement was decidedly worth while.[2]

About eight years later, in 1915, I thought the time was now ripe for introducing a really rational method.[3] According to this plan, the teacher would hand in to the registrar at the end of the term his class list not in alphabetical order but in rank order, and would draw near the end a line in order to separate those students who are recorded as having failed from those who are passing students. Two explanatory provisos are added to this

[2]Compare "A Statistical Study of Teachers' Marks," Peabody Journal of Education, March, 1932, pp. 310-312. Also: "The Limit of Uniformity in the Grading of College Students," Science, N. S., 40, 1914; pp. 530-532.

[3]School and Society, October, 1915; pp. 577-589.

simple method. First, a teacher may regard any group of students within the class as indistinguishable with respect to scholarship. For example, instead of reporting in a class of 30 or 40 for eight of these students the rank numbers, say, 11, 12, 13, 14, 15, 16, 17, 18, he may report all of them with the rank 14½. Secondly, in rather small classes, of scarcely more than a dozen, he may claim the privilege of omitting certain ranks from the list altogether; for example, in a class of only four, he need not report the rank number 1, 2, 3, 4, but may report 3, 5, 10, 11, if that suits his judgment better, in spite of the fact that there were not eleven but only four students in the class.

The faculty ordered that this be tried out by all teachers for one semester. It was tried, and it worked perfectly. But whenever the motion was now made in a faculty meeting that the ranking method be introduced permanently, a very small majority succeeded in beating the motion. The struggle went on for ten long years. What curious arguments were raised against the motion may be seen from this example: One influential faculty member who administratively controlled a good many votes, cried out that, since the method would require the registrar's office clerks to use tables and adding machines, they could not be relied upon to use these mechanical computing helps without making mistakes. It surely never occurred to him that banks and insurance companies run the same risk; they also employ clerks who use tables and adding machines and do not make mistakes with any serious frequency. After ten years I got so disgusted with the futility of further endeavors that I tried to forget the whole matter.

Now I rejoice in knowing that Oberlin College has introduced the straight ranking system of grading, and that it reports that in the second year the system is working well.[4]

All that I have said hitherto is only the preamble of my speech; however, the latter is quite brief. The problem which is to be solved is a practical one, one might almost say it is "a political" one—that is, it is the problem contained in this question: What do we do in transferring credits to other institutions? In this problem, I believe, Oberlin has failed.

My own answer to the question is, that we should treat the administrative officers of other colleges than our own always as if they were almost as intelligent as they actually are. That is, Oberlin College ought to report to the other colleges into which the student desires to be transferred, that during the first semester he passed in fifteen hours, in which his average rank per cent was fifty-first, and that during the second semester he passed in sixteen hours, in which his average rank per cent was only thirty-ninth, and that in a cumulative way he has passed in 31 hours, in which his average rank per cent was forty-fourth. No intelligent college administration could have any difficulty if it desires to translate the rank per cent into its own A, B, C, D

[4]Journal of Higher Education, January, 1932, pp. 21-25.

grades or into its own 90%, 80%, 70%, 60% grades. All that is necessary is a little statistical study of the prevailing centile scores in terms of either A, B, C, D, or in terms of 90%, 80%, 70%, 60%, or in any other artificial terms. And every college ought to have such information in its own files. So,—why should Oberlin worry? Why think of falsifying the actually reported average rank?

A second question, similar to this, might still be raised. What should Oberlin report to the parents of its students? Here again, I should say: Simply report the truth. Not all the parents may have a college education, but surely all of them could understand what it means if one of their children is reported with an average rank of eighty-seventh and another child with an average rank of forty-fourth in the work in which they have passed. Why not simply tell the truth?

But the Oberlin faculty did not have the courage of its conviction. After making this enormous step in advance, introducing a ranking method of grading, they spoiled the method again and adopted an official table of conversion for the (mis)information of parents and other schools. Instead of reporting ranks per cent, for example, thirty-fifth if the student was seventh among twenty, Oberlin reports to the other college that the student "made a mark of 56." Why 56? The number 56 for transfer purposes is quite arbitrary. It is fantastical. It has no scientifically or pragmatically acceptable definition behind it. Why not 66, why not 51?

If there had been twenty-nine students in this class of instruction, this same score of 56 would have been assigned from the Oberlin official conversion table (which I should rather call the confusion table) to the ninth of those twenty-nine students. But why? This is all fantastic. And why should the first among the twenty-nine receive from the conversion table the score of 85? Why not 90 or 93? And why should the twenty-fourth among the twenty-nine receive the score of 38? Why not 45 or 48? Who knows that this student is the kind of boy who in the fourth grammar school grade would have solved only 38 of 100 arithmetic examples? Or what else is meant by score?

Oberlin College is to be congratulated for its adventurous and scientific spirit in giving the ranking method of grading a real tryout. But the falsification of the ranks by converting them into so-called scores instead of leaving them plain ranks per cent is to be regretted. Fortunately it is not likely to do any irremediable harm. It is a superfluous sport of the ranking method.

EDITORIALS

ADJUSTING THE TIMER

Here I am two-fingering this typewriter with eyes glued on the keys, stoop-shouldered, awkward and clumsy. On the other hand, my secretary sits erect, eyes on queer little marks, fingers flying, the machine singing, the office alive with speed and accuracy. Why the difference? I learned (assuming I have learned) to type by typing. So did she. What then is the further difference? Practice, perhaps. Well, I practice and still I peck, peck, peck, using what some one has characterized as the "Biblical method"—namely, "seeking and finding."

Apart from other obvious reasons there must be yet some further and more satisfactory explanation for this particular comparative learning-situation phenomenon. Perchance this explanation is in the fact that I learned to do *by* doing while my secretary learned to do *through* doing. I had no teacher other than myself. She had a teacher plus herself. I worked alone, she under guidance. I was my own critic and supervisor. Hers was a critic and supervisor trained and intelligent. She touches; I pound.

It may be there is yet an even more illuminating secret. Peradventure it is this: In my learning process I used only a portion of what may be called the "Biblical method" referred to above—namely, "seeking and finding." On the other hand, it seems probable and reasonable that my secretary followed what may be termed the more complete Biblical method and that is "asking, seeking, finding." If this be so, it would appear that in attempting to solve the secret subtle mystery in this particular learning experience another clue in the alluring tantalizing search comes to light. And what is this priceless clue? It is the clue suggested by and implied in the word "asking." And why? This dynamic monosyllable is alive with interest. Desire is likewise wrapped up therein. A sense of dependence is clearly involved. An answer is in the offing. Excitement explodes motivation, that powerful self-starter which sets in motion those giant twin propellers, seeking and finding by name. Furthermore, this magic word asking implies some one to ask—in other words, the teacher. Even vastly more important, there is somewhere behind this word a personal, inner urge which prompts the asking, inspires the seeking, and anticipates the finding, thereby translating more immediately instruction into practice and transforming information into expression.

Perchance, then, the fundamental secret in this and in all similar learning situations is to be found when doing goes hand in hand with instruction and when instruction goes hand in hand with doing. And it would appear

that the "timer" which makes possible this desired simultaneousness is in the "asking." Hence, the wise, successful teacher is the trained master mechanic of the human mind and spirit who adjusts the "timer," knowing that in the learning mechanism there are three fundamental factors—asking, seeking, finding—these three, and that the greatest of these is the asking.

L. W. C.

CHILDREN OR THINGS

Children are being given less education, and of a poorer quality, than was provided a year or two years ago. The school term has been shortened very generally, supplies are provided less generously, equipment has depreciated without needed repair or replacement, faculties have been reduced even in the face of increased student load, and salaries have been reduced more drastically than in other public service.

Meanwhile, road construction has continued, and is continuing. While schools have been halted (probably wisely) in all expansion and drastically cut in maintenance, the proponents of roads are urging continued expansion of present road facilities, and road maintenance has not been questioned.

In times of financial stress most of us expect to do without new things. We make the old clothes do, tighten the bolts on the old car, patch the roof and hope for better times. Public economy might be expected to follow the same policy—keep what we have in as good condition as possible, but do without new things. School people have cheerfully gone this far, and farther, to help out in time of stress. They have a right to expect other phases of public service to do the same.

In many cases the issue is pretty clear. Funds are limited; shall we have new roads or maintain schools on the old basis? For the sake of the children now growing up, and of the civilization which they must build, the fight needs to be made on the general ground that children must be provided with education as good as that available two or three years ago before new things, roads or what not, are purchased.

N. F.

THE NEW BOOKS ON OUR SHELVES

[The reviews, most of them signed, are by appropriate members of the Faculty of GEORGE PEABODY COLLEGE FOR TEACHERS. Our limited space necessitates concise notices—brief, pointed, thoughtful comments, without elaboration.]

Plane Trigonometry. By WILLIAM WILDER BURTON. New York: Thomas Y. Crowell Company, 1931. Pp. x + 93.

A well written book that seems to be quite teachable. F. L. W.

Studies in the Organization of Character. By HUGH HARTSHORNE, MARK A. MAYS, AND FRANK K. SHUTTLEWORTH. New York: The Macmillan Company, 1930. Pp. xvi + 503.

This study is Volume III of the report of the Character Inquiry. It is concerned with "both the inner constituency or self integration of the individual and with his outer relations and social functioning." Data are gained from tests administered to 850 subjects in three populations designated as X, Y, and Z. Organization of matter is in five parts. Part V presents conclusions and implications of the three volumes of the report. Major conclusions appear to be that prevailing ways of teaching ideals and standards probably do little good and may do harm when the ideals set before the pupils contradict the practical demands of the very situations in which the ideals are taught, and that the normal unit for character education is the group or small community which provides through co-operation, discussion and effort the moral support required for the adventurous discovery and effective use of ideals in the conduct of affairs. Treatment technical. Especially valuable for techniques developed. L. W. C.

Survey of the Schools of Springfield, Ohio. By T. C. HOLY. Columbus: Ohio State University, 1931. Pp. ix + 84.

This is a study of the adequacy, fitness, and utilization of the present school plant; an estimate of enrollment increases and distribution; recommendations for additional plant facilities and means of financing the program in a city of seventy thousand population. R. L. H.

The Superintendent at Work in Smaller Schools. By R. V. HUNKINS. New York: D. C. Heath and Company, 1931. Pp. xi + 401.

This is a book of practical advice given by an experienced school superintendent for the benefit of young people beginning such work. The book consists almost entirely of personal discussions of practical problems which face school superintendents. It would have been much strengthened by making available the result of studies which affect some of these problems. N. F.

School Library Yearbook, Number Four. Chicago: American Library Association. 1931. Pp. ix + 278.

An authoritative digest of school library standards, laws, and rulings makes up the better part of this volume. The information, which is of date 1930-31 and includes administrative rulings of state offices not elsewhere available, will be invaluable to administrators, accrediting agencies, and committees engaged in formulating regional standards, and to all who have reason to determine the legal and educational status of school libraries and librarians.

Additional items of interest are a reprint of Doak S. Campbell's recent report on the status of high school libraries with respect to the new standards of the Association of Colleges and Secondary Schools of the Southern States; a survey of library training agencies in the South; and a continuation of the annual bibliography on school libraries covering July, 1928—June, 1929. L. F. F.

New Progressive Road to Reading, Introductory Book Three. By GEORGINE BURCHILL, WILLIAM L. ETTINGER, EDGAR DUBS SHIMER AND NATHAN PEYSER. Newark: Silver, Burdett and Company, 1930. Pp. 192.

An easy reader for both silent and oral reading. The exercises for thought are varied and comprehensive. M. R.

Reading For Public School Administrators. By ARTHUR I. GATES. New York: Bureau of Publications, Teachers College, Columbia University, 1931. Pp. vi + 126.

A brief and practical account of those phases of the teaching of reading which are of particular significance to school administrators. The content is highly selected and condensed. On the other hand, the treatment is clear and will give the reader an excellent basis for choosing wisely both materials and methods to be used in the teaching of reading. This is an excellent text for school administrators. N. F.

The Effect of Unfamiliar Settings on Problem Solving. By WILLIAM A. BROWNELL AND LORENA B. STRETCH. Durham, N. C.: Duke University Press, 1931. Pp. iii + 86.

The purpose of this study was to discover whether familiarity or lack of familiarity of the settings described in problems had any effect on children's success in solving problems. In formulating the problems care was taken to assure that only the settings of the problems were changed. Four degrees of familiarity were determined by a preliminary test, ranked as a, b, c, d. There was marked decrease in the number of correct answers from a to d. The number of correctly chosen operation decreased from a to d, but there was little variation in the accuracy of computation in the processes chosen. For individual children, the settings seem to have no general effect upon the choice of operation.

F. L. W.

Evolution. By J. ARTHUR THOMPSON. Chicago: American Library Association, 1931. Pp. v + 48.

One of the "Reading with a Purpose" bulletins (No. 57) in which an authority presents the great steps in organic evolution, gives illustrations, then lists eight books that will permit true students to go as deeply as they like. H. A. W.

The Queen of the Sciences. By E. T. BELL. Baltimore: The Williams and Wilkins Company, 1931. Pp. i + 138.

"She" is mathematics, and those who would understand something of the scientific and intellectual progress of the age must possess a bowing acquaintance with "her" such as is provided in this book. Oddly enough, the pages are *not* crowded with equations.

H. A. W.

The School Dormitory. By CARRIE ALBERTA LYFORD. Boston: M. Barrows and Company, 1932. Pp. v + 200.

A comprehensive study of Dormitory Supervision, embracing chapters on Organization for Dormitory Supervision, Student Participation in Dormitory Management, The Dress of School Girls, Planning and Furnishing Dormitories, Provisions for Laundry, The Food Department, The Dormitory as a Home, etc. The study is interesting and worth while to managers of school dormitories. I. Z. C.

Survey Field Book for the Analysis of a High School Building. By N. L. ENGELHARDT. New York City: Teachers College, Columbia University, 1931. Pp. iii + 45.

This set of forms is for recording field notes while surveying high school plants. It includes a score card for evaluating high school buildings. By using this field book on surveys, comparable and complete data will be assured. R. L. H.

An Introduction to the Scientific Study of Classroom Supervision. By. A. S. BARR. New York: D. Appleton and Company, 1931. Pp. xxv + 399.

This is a real contribution to the literature concerning supervision of instruction and helps meet a long and widely felt need in the training of supervisors and in the work of supervisors. There is a real attempt at integration of different phases of scientific study of education, with the viewpoint of the supervisor always in mind. The organization of the book is clear and consistent, and the treatment quite comprehensive, always bearing in mind the limitations of the adjective "scientific." The citations and bibliographies are exceedingly serviceable. N. F.

The Relative Merits of Cursive and Manuscript Writing. By THELMA G. VOORHEES. New York: Bureaus of Publication, Teachers College, 1931. Pp. ix + 58.

A summary of studies of the relative merits of these systems of writing. A report of an experimental study made under the direction of the author is included. The summary is well made, and the subject exceedingly timely. School officials need this book.

N. F.

Presson Biology Test. By JOHN M. PRESSON. Yonkers-on-Hudson: World Book Company, 1930.

A series of two tests of the usual type for (1) plant biology, and (2) animal biology. These tests are open to all of the general criticism of such tests and in addition to the special criticism of this method of measuring achievement in laboratory courses or those in which field excursions are taken. To make a high grade in such a test, the student must not know too much about any phase of the subject; otherwise he may not give the *dogmatic* answer required. For instance, the *beaver* would be only the largest known rodent when a restricted area was considered. Since high school textbooks do not agree on the answers to many test items, we must either have such tests for each textbook or what is probably better, tests prepared by the teacher based on the type of work which he emphasizes in his teaching. J. M. S.

Citizenship Through Problems. By JAMES B. EDMONSON AND ARTHUR DONDINEAN. New York: The Macmillan Company, 1927. Pp. xvi + 550.

A general treatment of the social sciences based on practical problems of economics, sociology and civil government. Written for junior high school students.

O. C. A.

Florence Nightingale. By LAURA E. RICHARDS. New York: D. Appleton and Company, 1909, 1931.

This story of the life of Florence Nightingale is written simply and interestingly, especially for children of about junior high school age. It is excellently done and contains questions for study and topics for review in the appendix. N. F.

The Vocabulary of Arithmetic. By G. T. BUSWELL AND LENORE JOHN. Chicago: University of Chicago, 1931. Supplementary Educational Monograph No. 38.

A thoroughgoing piece of work which includes a collection of arithmetical terms with both group and individual tests of the vocabulary of arithmetic. A thoroughgoing study of the way in which these terms are introduced in textbooks is included, together with a very valuable section on the teaching of arithmetical terms.

This monograph is a real contribution to the teaching of arithmetic. N. F.

An Introduction to Vocational Education. By ARTHUR B. MAYS. New York: The Century Company, 1930. Pp. x + 323.

In the light of a prevailing misunderstanding of meaning and terminology in the field of vocational education, Professor Mays' book clearly defines for school people generally the underlying factors of this important part of the education of every individual. All students of education should have a knowledge of the historical, social and economic background of vocational education which should be thought of as interrelated with and not opposed to cultural education. This book should prove valuable for every lay reader and teacher as well as for students of education for whom it is primarily intended. T. T. L.

The Conquest of Life. By THEODORE KOPPANYI. New York: D. Appleton and Company, 1930. Pp. xiii + 263.

The aim of the author is expressed in the preface thus: "The task of this book is that of a courteous guide pointing out some pleasant spots in a labyrinth-like huge metropolis of modern biological science." The success which crowned this endeavor is indicated by this book being selected as the book of the month for September by the Scientific Book Club. The viewpoint is primarily that of the physiologist, as is indicated by the stress placed on the work of William Harvey, Claude Bernard, and Beaumont, in the historical section. A separate chapter is given to the endocrine glands. They are treated in a scientific manner and not in the sensational, false way so characteristic of popular writing on the subject. The language used is simple and direct and delightful to read. The style is one of the most charming of the newer scientific literature. Perhaps it appears at its best in the chapters on the *Souls of Animals* and *The Conquest of Diseases.* This is a book that every educated man, including the biologist, should read.

J. M. S.

New Progressive Road to Reading, Introductory Book Two. By GEORGINE BURCHILL, WILLIAM L. ETTINGER, EDGAR DUBS SHIMER AND NATHAN PEYSER. Newark: Silver, Burdett and Company, 1930. Pp. 160.

An exceptionally well illustrated second reader with appealing stories. N. B. P.

Woodwork in the Junior High School. By WILLIAM E. ROBERTS. Peoria: Manual Arts Press, 1930. Pp. 248.

A book for the woodworking teacher and pupil. It has a large number of well designed projects organized into a course of study suited to the junior high school. One of the distinctive features of this book is its practical treatment of design. Many suggestions are given to create new designs for individual projects. Job sheets, shop records and information methods of instruction are emphasized. L. L. G.

Fun with Numbers. By JOSEPH C. BROWN, HELEN COOK MIRICK, J. FREEMAN GUY AND ALBERT C. ELDREDGE. Evanston: Row Peterson and Company, 1931. Pp. vi + 152.

A well written little book that seems to live up to its name. Designed for second grade. F. L. W.

Conference on Examination. By PAUL MONROE. New York City: Teachers College, Columbia University, 1931. Pp. i+ 316.

Perhaps the most interesting professional book of the year. 'Tis perhaps the best summary of the philosophies of comparative education that can be found. One very interesting feature is that so specific a question as the one bearing on examinations could become the subject of so rigid a discussion of the purposes and aims of all education. The clarity of beliefs and of statements on the part of the delegates, particularly M. Desclos, holds one's admiration, whether or not he agrees with these same beliefs. Close approximations of the philosophy expressed by Dr. Becker and other German delegates to what may be termed the most advanced American beliefs in the same regard are quite interesting. The philosophy of the Scottish delegates, particularly as expressed by Professor Burns, holds one's interest throughout. Each student of Education should read carefully this summary for he would have a hard time finding a better expression of the purposes and philosophies of education. S. P.

Hopi Girl. By DAMA MARGARET SMITH. Stanford University: Stanford University Press, 1931. Pp. ix + 273.

The story of a Hopi girl, told with sympathy and understanding. The book is of particular value in developing kindly and helpful attitudes toward Indian affairs. It should be in every school library. N. F.

Teachers' Salaries. By WILLARD S. ELSBREE. New York City: Bureau of Publications, Teachers College, Columbia University, 1931. Pp. iii + 286.

A most interesting book dealing with this important question. The Chapter dealing with the Economies of Teachers' Salaries is especially valuable. The bibliography is suggestive and well selected. All interested in this problem will need this book. J. D. C.

The Model Aircraft Builder. By CHELSEA FRASER. New York: Thomas Y. Crowell, 1931. Pp. vii + 384.

This contains interesting information about the occupation of the aviator. There is a clear description of how to make models of ground training planes, airports, and various flying and non-flying planes. It is written for "boys and girls who are air-minded." T. T. L.

Helpers. A Series of Four Related Stories By ROSE LEES HARDY AND GENEVA JOHNSTON HECOX. New York: Newson and Company, 1931. Pp. 128.

These four booklets are carefully graded for supplementary reading in the later part of the first grade. They are interesting to children, well illustrated and attractively made. N. F.

I Find My Vocation. By HARRY DEXTER KITSON. New York: McGraw-Hill Book Company, Inc., 1931. Pp. xvi + 216.

This is a high school text, written for the purpose of imparting occupational information in connection with vocational guidance. The book is not intended to give facts about miscellaneous occupations but "requires each pupil to carry on a project throughout the course: namely, to choose a vocation and plan how he will prepare for, enter, and progress in it." The material presented and the methods used are based upon the latest information obtainable. The use of this book is likely to result in interested study groups. T. T. L.

Secondary Education and Teacher Training in Germany. By DR. CARL H. BECKER. New York: Columbia University, 1931. Pp. 58.

(1) Present Situation. The present German educational system works toward the best development of every individual child as a member of society. The dual system of education required by the former State made this ideal impossible.

(2) Secondary Schools. The present secondary schools present a differentiated common school with provisions to provide unity and democracy together with a wide variety of training.

(3) Teacher Training. The Prussian system places elementary teacher training schools on the level of but separate from the university. Secondary teachers are trained in the university. The characteristics of elementary and secondary education in Germany account for a different training. R. W. E.

Teaching the Elementary Curriculum. By SHELDON EMMOR DAVIS. New York: The Macmillan Company, 1931. Pp. xiv + 549.

Each chapter deals with the teaching of a subject commonly included in the elementary curriculum. The treatment is clear, and based upon good educational literature interpreted in terms of rich experience in public school work. The bibliographies and the educational glossary are exceptionally good.

This book should prove useful to teachers in training, to inexperienced teachers, and to older teachers who have allowed themselves to lose touch with modern education. N. F.

Occupations Through Problems. By JAMES B. EDMONSON AND ARTHUR DONDINEAU. New York: The Macmillan Company, 1931. Pp. ix + 214.

This is a text for classes in occupations in the upper grades of junior high school. It is designed to cause the pupil to consider his own qualifications and to acquaint him with a wide range of occupations. Emphasis is placed upon problem solving, and for this purpose exercises are placed throughout the text. Use is made of pictures, charts, and graphs, and a carefully selected reference list is provided for supplementary reading. T. T. L.

The Football Quizzer. By WILLIAM J. SHEELEY. New York: A. S. Barnes and Company, 1931. Pp. 9 + 100.

A unique, interesting, and constructive treatment of the football rules—together with valuable illustrative cases of their application. W. A. B.

A Critical Study of the Teaching of Elementary College Mathematics. By JOSEPH SEIDLIN. New York: Bureau of Publications, Teachers College, Columbia University, 1931. Pp. iii + 107.

An attempt is made "to investigate and analyze educational practices and methods of collegiate teaching in the field of Freshman and Sophomore mathematics." A critical analysis of 150 classroom recitations and 50 "intrinsic interviews." Very interesting reading but one wonders just what the "contribution to education" is. F. L. W.

Methods in Educational Research. By FREDERICK LAMSON WHITNEY. New York: D. Appleton and Company, 1931. Pp. xvii + 335.

This is a textbook in research and thesis work for teachers colleges and university schools in education.

The author presents a new classification for the generally accepted methods in educational research.

The source material cited in the book along with the bibliographies is an added feature to the majority of books of this type. D. H. C.

Our World of Education. By HAROLD LYMAN HOLBROOK AND A. LAURA MCGREGOR. New York: Allyn and Bacon, 1930. Pp. xiii + 284.

Using the seven cardinal principles a long needed explanation of the goals of all education is presented to the pupil. Excellent outlines are furnished to provide checks upon (1) education preparation for future needs, (2) educational needs of one's vocation, (3) self-analysis of vocational aptitudes, and (4) job-analysis. R. W. E.

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